

R E P O R T
ON THE
D E H R A D O O N ,

1 8 2 7 - 2 8 .

BY THE
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C a l c u t t a :

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REPORT ON THE DEHRA DOON,

1827-28,

BY

THE HON'BLE F. J. SHORE.

[The following Notes are the result of four years' residence in the Dehra Doon. The Report was originally compiled and submitted to Government in the beginning of 1827, additional observations were collected in the end of that year and in 1828, and are now incorporated with the original Report. Of the state of the valley since that time I have no means of knowing.]

NAME.

The word Doon, signifies valley. Little was known of it till the time of Aurungzebe. In the year 1756 Sumbut, i. e. about A. D. 1700, Gooroo Ram Roy, who resided at Kirtalpoor (20 koss this side of Amritsir) leaving his nephew there, went to Dillee and Agra to pay his respects to Aurungzebe; from thence he came here, and procuring a grant from the Rajah of Sroenugur for three villages, dug two tanks, brought a stream down an artificial canal from the hills, and built a temple at the village of Dharmoowālā, changing its name to Dehra (resting place); it is also called Gooroodwārā (gate of the teacher).

DESCRIPTION AND BOUNDARIES.

2. The valley lies within the line of what are commonly called the Himalayah Mountains, although that term, strictly speaking, should only be applied to the line of the snowy peaks, being separated from Suharapooore by a low range of hills, usually called the lower range; the crests of this range form the boundary on the south-west. On the north-east it is bounded by the independant part of Garhwall,—the crests of what are denominated the second range, on which are situated the convalescent depôts of Mussooree and Ludour, form the limit of the Doon territory. On the north-west it is bounded by the Jumna, and on the south-east, strictly speaking, the boundary of the valley is the Ganges; but a small strip of land, varying from a quarter of a mile to five miles broad, on the other side of the river, between that and the hills, forming a part of the Purgunnah of Chandee, has since the acquisition of the valley by the British Government, been annexed to the Doon. The remaining part of the Chandee Purgunnah, divided from the former by a low range of hills, was separated from Mooradabad and annexed to the jurisdiction of the Doon last year: the Rowasun is now the boundary between these two districts,—a small stream, which enters the plains from the hills at Lal Dhang and joins the Ganges about 15 miles below Hurdwar: the length of the valley consequently lies from north-west to south-east. Hurdwar is situated in N. Lat. 29° 57' 16." E. Long. 78° 9' 4"—Dehra the Town in N. Lat. 30° 18' 51," E. Long. 78° 1' 69". The whole of the Chandee Purgunnah was formerly an appendage of the Doon, but about forty years ago the Nuwab of Lucknow, or the local Governor at Nujceabad, it is not very clear which, sent up a force which took possession of the whole of the Purgunnah of Chandee, building a fort at Jogeeewala; consequently it was claimed by the English as an appendage to Rohilkund, when that province was ceded to us in 1801. After our acquisition of the Doon, Upper Chandee

was immediately annexed to the valley, and the remainder was so disposed of last year. The Doon Proper comprises five sub-divisions or Purgunnahs, viz., Kulianpoor, Suntoor, Busuntpoor, Deooree, and Suhujpoor. The parts near Hurdwar and Dehra are also distinguished respectively by the names of Lower and Upper Doon.

HORIZONTAL SUPERFICES.

3. The valley itself, including the upper part of Chandee, is in the longest part, i. e. from Hurdwar to the banks of the Jumna opposite Kalsee, 57 miles, and in the broadest part, i. e. the centre, 15 miles, road measurement, which, however, does not wind much. In straight measure it would average about 45 by 11 miles; this would give 495 square miles. Of this, streams may take up about 20; three insulated hills, the Nalapannee, Nuwada, and Zamunkhata about 30; (some little part of which, however, are cultivated, perhaps one square mile); ravines and broken ground about 50; cultivation about 25, and waste, but fit for cultivation, 360, of which two-thirds may be grass and one-third forest land. The lower range of hills is about fifty miles long by four broad, of which about two-fifths may belong to the Doon, for the line of crests is not in the centre; this would give 80 square miles. From the broken nature of the ground scarcely any part of this is fit for cultivation, but the whole range is covered with trees of various sorts, among which is some very fine timber. A fir, something like the coarse Scotch fir, is also found on these hills. To these must be added a part of what, strictly speaking, belongs from its situation to the hills, viz., a hill division not far from Dehra, opposite the Rajah's province of Sukniana, but which has always been annexed to the Doon. It comprizes about 60 square miles, and contains 70 villages, or rather petty hamlets, some of them not having more than one or two huts; the cultivation may probably amount to 2½. We have yet to reckon the ascent of the hills of Mussoree, Budraj and Ludour, to the crests of which the boundaries of the Doon extended. This comprises about 80 square miles, of which probably 3 may be cultivated, between Bhogpoor and Rekikes; the foot of the hills form the boundary of the Dehra valley.

4. There are, however, in the latter part many spots, and some few on the lower range of hills, both together perhaps equal to 20 square miles, which are even now fit for cultivation, several more, which by levelling and terracing, as is done in the hills, might be made so; and several other spots, and some even in that under the head of ravines and broken ground, calculated for the "keel" cultivation, hereafter described.

5. In addition to the whole of the above, must be reckoned the half of Purgunnah Chandee, transferred from Mooradabad to this jurisdiction last year. It is a small three-cornered bit of land, containing about 35 square miles. It contains only 7 villages. About 1½ square miles may be cultivated, and one-fourth unfit for cultivation. It is separated from Mooradabad by the stream Rowsun, and from Suharunpoor by the Ganges. It joins the Dehra Doon and the Sreenugur Tehasildaree, making the district more compact: the map shews how the whole lies.

6. The total would thus appear to be about 740 square miles, of which only 26½ are cultivated, besides which more than 400 are fit for cultivation.

RIVERS.

7. There are only two, viz., the Ganges which enters the Doon at Tapoobun, about 2 miles above Rekikes, and leaves the valley at Hurdwar, running about 17 miles within

the Doon; it is rapid and full of islands, which by dividing its stream makes it sometimes fordable in some places, although with difficulty. 2d, the Jumna, which enters behind the Budraj mountain, and runs into the plains about 3 miles above Badsha Mahal an ancient royal hunting seat: its course bounds the Doon for about 18 miles (by the river). The Ganges bursts out through a break in the hills, full a mile broad, without having any thing particularly picturesque about it; but the Jumna winds for about nine miles through the lower range of hills; the scenery along its banks is beautiful. Neither river is navigable for any thing but timber rafts for several miles after leaving the Doon, on account of the numerous rapids.

8. There are many streams, some of which come from the second range, some from the lower range, and some rise within the Doon: the Sohun, one of the first description, is the largest and the only one of any size: it is ordinarily about 30 feet wide by 2 deep, about 5 miles from where it joins the Ganges; but it is impassable after heavy rain. The streams are beautifully clear, running over gravelly and stony beds, some of which are very broad. There are many stream courses, which are dry, except after rain; and the quantity of water that even in the rainy season comes down, is small in proportion to their breadth: others again have water running in some places, which disappears under the gravel, and re-appears again here and there.

9. Near the centre of the Doon, water for irrigation is not procurable; whilst towards the Jumna some trouble and expense will obtain it: and in some parts, towards the Hurdwar end of the valley, there is more than could be required, procurable with very little trouble.

PASSES.

10. To the plains these lie through the lower range of hills, and are merely the beds of torrents, of which two make a pass. These rising at the crest run one into the Doon, and the other into the plains. In some a small ridge is crossed between the heads of the two streams, and there are three or four Choor Ghatas (thief paths) winding over the ridges: these are difficult foot-paths. There are also two, bordering the Gunga and Jumna, which go round the two ends of the lower range of hills; and one which crossing the Jumna goes into the Kearda Doon and from thence branches either into the Sikh territory or by Nahn to Subattoo. The first sort are very stony and steep near the crest on the plain's side. Altogether twenty are known, of which three of the first mentioned sort are practicable for carts, viz., Timlee, Kheree, and Khansrow, but with great difficulty:—three for laden bullocks or ponies, viz., Kaloowala, Koojnawur, and Salempoor: the rest are foot-paths, some of which are bad for footmen, but others may be passed by a horseman, if he dismount and lead his horse carefully at the bad parts. There is also a line, or rather track of road from the Doon into Rohilkund, by crossing the Ganges at Lukurghat, and going down the Chandee province, crossing the hills, which divides it at a pass called the Deleeghata, and thence to Najeebabad. It is a much better line to pass from the Doon to Rohilkund were there any traffic that way, than to go out at Hurdwar and keep along the right bank of the Ganges to Bhojpoor, at which there is a ferry. Formerly the Cashmeer caravans used to pass by this road.

11. Those into the hills (Gurhwall) are merely foot-paths; some ascend the hills at once, others lie first for some way along the bed of a stream: those used for merchandize are by Rajpoor, Nagul, by Sakniana up to the bed of the Sohun; Thanoo, Bhojpoor, up a stream lying between these two villages, Rekikes, and after crossing the Jumna, by

Kalsee into Jounsar, and through the Keearda Doon by Nahun to Subattoo. This description is of the passes in their natural state.

ROADS.

12. The roads were till a short time only foot-paths, but since an officer has been resident here, he has with some convicts and liberal aid from Government, made some very good roads. From Shorepoor Choki (at the Doon mouth of the Kheree pass) to Rajpoor through Dherce, 15 miles have been made. From Dherce to Hurdwar is 31 miles, 20 of which is over a new line, over a steep hill. The old road for this part was 23 miles, and crossed 34 streams, some of which were very rapid and full of large stones: the Sohun was crossed twice. Of the whole, nearly 20 miles are finished, and it is hoped the remainder will be by next season of 1827-28. In addition to this, about 5 miles in different places have been made; also about 6 miles by the villagers, which mode of constructing roads is encreasing; as by a little persuasion, they seeing the advantages, very willingly work on them, only asking for the loan of tools, and a man to show them how the road is to be made.

13. The new roads now most required are from Dherce to Synspoor, and thence branching to Kalsee and Rajghat, from Dehree to Nagul, and from Hurdwar to Rekikes. In the Pergunnah of Chandee also there is probably room for much good in the road-making department.

14. There are two roads estimated for, and authorized by Government, now constructing under Lieut. Debude, of the Engineers: one is round the Hurdwar pass, and is finished as far as was authorized; but it should be carried on for about a mile more at each end, to make the work complete, as those parts are with difficulty passable after heavy rain. The estimate was 8,000 rupees in addition to tools and gunpowder from the Government stores, and the services of a non-commissioned officer and six of the sappers to superintend the mining, which may be reckoned at 4,000 rupees more. The road is three-quarters of a mile long; almost the whole of it is either cut through rock, or supported by a steep stone wall built for that purpose: two bridges of masonry, but of no great size, were also found necessary.

15. The other is through the Kheree pass, which is 7½ miles long. For four miles and three-quarters of this, the sum of 12,000 rupees was authorized; the road is now in progress, but it will cost probably more than the sum allowed. It will, however, be a most useful work; but as this subject will shortly be brought before Government more at detail, it is needless enlarging now. The mode in which this road was attempted to be made, is however worth noting. In one place, the officer in charge of the Doon, observed the centre of the water course raised so as to be rarely covered with water, which made its way in a channel at each side; the idea struck him that if a road could be so constructed it would be practicable at all seasons of the year. It was out of the question to make a road at either side of the river bed, unless at a most enormous expense; for in some places many feet, in one not less than a hundred, of perpendicular rock must have been cut through, and the immense number of tributary streams would have required an equal number of bridges. The road was made accordingly on the above principle, and found to succeed completely near the upper part of the water course; but towards the lower end the current of water in the rains is too great to admit of it. This part being, however, pretty level, is rendered passable for nine months of the year by re-

moving all the large stones and leaving a bed of gravel immediately after every rainy season. Near the crest the road is still much too steep and should be improved.

BRIDGES.

16. There are no bridges in the province, with the exception of two small ones lately built by Government, over a ravine near Dehra, and those on the road near Hurdwar just mentioned.

FERRIES.

17. One at Rajghat on the Jumna, leading into the Kearda Doon, two over the Ganges, one at Chandee, the other at Dialwalee, 13 miles below Hurdwar : all these have good boats fit to transport carts and heavy baggage. Two others on the Ganges at Lukurghat and Rekikes, but they are only canocs. The Jumna opposite Kalsee is fordable except in the rains, when temporary rafts are made ; about two miles below, it receives the Giree Gunga, and a mile below the Tonse ; both come from the opposite side : the Tonse is a larger river than the Jumna, and is always crossed in a boat. It has been said that the Ganges being so full of islands, is in some places occasionally rendered fordable. The only permanent ferries are those at Chandee on the Ganges and Rajghat on the Jumna ; at the others, boats are not always to be found, but are sometimes kept up by the neighbouring villagers, and at Dialwala by the farmer of the forest produce duties. The traffic at these places is not sufficient to support boats regularly.

HOUSES.

18. The houses of the Doon are chiefly grass huts : some few are built of unburnt bricks. The natives had an absurd idea, that mud walls built by the hand or "*en pie*" would not stand ; but the English residents have shown the contrary by building in this way ; they are partially getting into the practice. The only masonry houses (exclusive of the temples, and the English houses) are three at Dehra, one at Rajpoor and three or four at Rekikes belonging to two Brahmins, the rest to shop-keepers : there is one at the Doon side of the town of Hurdwar, the property of a zemindar in the Doon, who, however, was only enabled to build it by having married the only daughter of a rich Sikh Surdar : it is the only house forming part of Hurdwar situated within the limit of the Doon, and like all the other houses at Hurdwar, merely a country house for the fair time. It certainly is amusing to see the contrast in the immenso sums laid out in these Hurdwar country houses, and at Kunkul, two miles off, some of which have cost thirty or forty thousand rupees each, and which the owner sees perhaps for a few days once in five or six years,—and the comparatively miserable huts they are content with at home ; but fashion and prejudice will do wonders.

The houses of the hill division annexed to the Doon, and some few in the valley itself, are built of stone, as is the hill custom, but chiefly thatched, a few being slated ; some few are upper-roomed, and a very few in the town of Dehra have tiled roofs.

TEMPLES.

19. There are but few temples : the handsomest is that at Dehra, which is a Sikh temple, founded by Gooroo Ram Roy, as above mentioned, in 1756 Sumbut, A. D. 1790.

It is an enclosed square, with a gate in the centre of each wall. In the area are five buildings, one in the centre and one at each corner, built in commemoration of the Gooroo's four wives, at a short distance from it : they are built of brick, plastered over and painted in imitation of mosaic, and though not large, are neat, and the whole together, being well clothed with trees, has a retired, quiet appearance well suited to religious feelings. In the centre building is the bed of Gooroo Ram Roy. In its structure the building has more of the Moossulman than Hindoo style of architecture. The establishment all live in detached houses.

20. There is a very neat temple at Rekikes, and a small one at the village of Khurkuree near Hurdwar, and some others in different parts of the valley ; but none of them have any thing in their appearance particularly worth describing.

21. Although not a temple, the holy spot of Sostro Darra (or thousand drippings) must not be forgotten. It is often called Sansedara (which may perhaps be a corruption Sungsar Dara, the world of drippings.) It is formed by a small stream, which at its junction with another, falls over a perpendicular rock about 30 feet high. The stream is strongly impregnated with lime, which leaves a crust on every thing on which it falls. This has gradually accumulated on the edge of the rock till it projects and forms a shallow cave, but as trees, bushes, and grass have grown on the edge of the rock, and in the earth brought down and deposited in the accumulation of lime, the water now instead of falling over the rock drips through the accumulated mass (of perhaps ages) in thousands of streams, some as large and some larger than very heavy rain, whence its name. It is a most beautiful natural object, and at certain hours at particular seasons is rendered more so by an artificial rainbow caused by the rays of the sun falling upon the light drippings and spray.

22. Every stick, leaf or blade of grass which it touches becomes a petrification: perhaps not strictly speaking such, for the mode in which they appear to be formed, is by a crust of lime surrounding the substance in the first instance : this gradually eats away the inside, which is filled up with the incrustation of lime. There are enumerable stalactiles hanging from the roof of the cave, and the ground underneath is covered with stalagmite, so hard that the blows of a strong man with a heavy sledge hammer are requisite to break it. The breadth of the part through which the water drips, including the above and another smaller cave, is perhaps twenty yards.

23. Like all uncommon objects, it is a place of *teeret* or holy pilgrimage ; a lump of stalagmite in the smaller cave, passing for Mähä Deo. The pilgrimages made to it are not more than sufficient to give a subsistence to two poor Brahmins, who reside at the village of Nagul, a mile off, and attend on those who pass through to visit the spot. The English visitants are much the best customers, as they pay more for specimens of the petrifications than the Hindoos do for the Brahminical ceremonies attendant on bathing.

Joining the larger stream, on the opposite side to the dripping rock, is one strongly impregnated with sulphur, which has by some been said to resemble the Harrogate water. This stream also petrifies sticks, leaves, &c.

FAIRS.

24. Of these there are but few, and those very poor. The best is the Hoo-lee fair held at Dehra. It is chiefly frequented by the Sikhs, and the average number of

people is perhaps three to four thousands. It lasts about nine days, during which time some of the people go to and return from Hurdwar. When the Dehra fair breaks up, most of the assembly go home, but some few wait for the Hurdwar fair. Very little merchandize is brought, chiefly consisting of hard-ware, cloth and a few ornaments; the goods are of the coarsest description. At Chundermunec and some other places, a small fair is held occasionally, that is, a few of the Doon people, chiefly the women and children, go and bathe there. At Rekikes and Tupobun a small collection of people takes place after the Hurdwar fair; it consists almost entirely of those who go from the latter to Budree and Kedarnath, Gungotree and Jumnotree, and other holy places in the hills: some to only one, some to more, some to all.

FORTS.

25. There is no fort now left in the province; but the remains of several are just visible, built by the Government, according as the existing Rajah or his local Governor took a fancy to make any particular spot his residence; of these Nalapannee or Kulunga, where Gillespie was killed (the latter is a general name for a fort on a high hill) about four miles from Dehra, is the chief: this and one upon Budraj were Goorka forts, and were built of blocks of stone with a little masonry: at Koshalpoor near Synspoor, Suntoor Gurh, near Majra on the Kheree road, a spot above Rajpoor, at Jogceewala in Upper Chandee, in which is a well lined with masonry, and possibly in other places, are the remains of ancient forts. The latter are all in the valley, and were built of mud like those in the plains. The whole are now in ruins, and the vestiges of some are not sufficiently perceptible to attract a person's attention unless he be told what once existed. Of Kulunga, to which but a few years ago the attention of all India was drawn by one of the most gallant defences recorded in history, and by the death of Gillespie, literally not one stone remains upon another, and scarce even a vestige to show that any building had ever been erected on the spot. Two old burr trees at the highest peak of the hill, mark the spot where one of the inferior Goorka chiefs fell. They were lopped of all their branches and reduced to miserable stumps by the English guns; they have now sprouted and are flourishing as green as ever, while the majority of those who fought around them, and by whom they were nearly destroyed, have since mouldered into dust.

TOWNS.

26. The only place now approaching to any thing like a town is Dehra, situate in E. Long. 78° or 69°, N. Lat. 30° 18' 51," and may be said to have been founded by Gooroo Ram Roy, as only a small village previously existed on the spot: it contains 518 houses, and 2,126 inhabitants. What are now the villages of Jakhun and Nuwâdâ are said to have been, the former a very large town, which decayed many years ago; the latter a tolerable sized one which decayed about thirty years since. There can be no doubt that Jakhun was once a considerable place; the remains of stone temples, and blocks of carved stone, are still to be seen. There are also the remains of stone walls which once surrounded the enclosures usually made about houses in this part of the country. In digging near the spot, remnants of pottery were found in considerable quantities. At Nuwâdâ are still the remains of stone houses two stories high.

VILLAGES.

27. Some are very good sized: the largest contains 97 houses. There may be about fifteen, each containing fifty and upwards, and twenty seven, each containing more than

thirty and less than fifty: the rest are small, some only containing two or three grass huts, and some of the hill villages only one house each.

POPULATION.

28. At the end of 1823 an attempt at enumeration was made; which, as the district was small and tolerably compact, it was thought might be feasible. The result was as follows:

Houses.	Subr. Do.	Men.	Boys.	Women.	Girls.	Beg. Fakeers.	Total.
4,962	8,188	7,465	4,309	6,133	2,031	241	20,179

Of these the first column, houses, stands for families; the second is the actual number of houses; as some families have several houses belonging to them, all enclosed in the same yard, inhabited by different members of the family. The facility and cheapness of building the grass huts, of which most of the dwellings are composed, encourages this. This would give on an average rather more than four to a family; which is probably a tolerably correct estimate.

29. The small number of children, in proportion to the men and women, will excite surprise. It may in part be accounted for by the fact that a large number of the men under thirty years of age, are unmarried, and that a considerable number of the women are old widows: for this the only probable cause is the Goorka invasion in 1804, and subsequent tyranny, which caused the death or emigration of some thousand inhabitants; the deaths chiefly falling on the men; while of those who remained, numbers destroyed their female children as soon as born, both to avoid the trouble and the expense of marrying them, and for fear of their being victims to the licentiousness of the Goorkas, who for some time did not scruple at taking any handsome girl they saw. This, however, is only a suggestion.

30. To the above must be added the Sirmour Battalion. This being a local corps, is permanently cantoned at Dehra, the families of many of the men live with them, many of them also have a number of relations seeking service, residing with them; consequently the numbers in and attached to the regiment amount to more than is usual in regular corps. The total number of people of all descriptions in the lines, is perhaps 4,100, viz., fighting men 900; followers and families, at 3 to 1, 2,700; Bazar, officer's servants and miscellaneous 500.

31. The establishment of the Court Jail, &c. may be estimated at 250, which will make a total of 24,527, for the population of the Doon, excluding Lower Chandee.

32. During the cold weather, i. e. between the sowing and reaping of the wheat crops, about 2,000 hill men come down to work as laborers; and about an equal number from the plains to cut timbers, and bamboos, to make line, khat, and other mercantile purposes.

WELLS.

33. There are very few, which in some parts is owing to the great depth required to find water, and in others to the people not being in the habit of digging them: in the Hindoostanee phrase "their fathers never did, how can they?" for in some parts of the Doon

wells would be extremely useful, to supply water both for drinking and irrigation, as is done in the plains,—and might be dug at very little expense.

34. By mentioning the wells and their depths, some idea may be formed of the irregularity of the Doon soil: there is one in the town of Dehra, total depth 88 feet, depth of water in hot weather 6 feet. This was dug 41 years ago; it is 15 feet in diameter and lined with masonry. One at Suthee Bag, 75 feet total depth, dug in 1823 by Juswunt Sing, a Sikh Surdar, for the use of the pilgrims to the temple at Dehra, also of masonry. One at Jajra, about 4 miles from the former, thirty feet deep, a fine stone well, dug many years ago. One at Hurripoor, two miles from the above, fifteen feet deep. Two at Synspoor, and one at Dhakee, a mile off, all shallow. One at Rampoor or Hurrowalee, six miles from Dehra, on the Hurdwar road, 45 feet deep; all of masonry. A good well of masonry in the fort of Jogeewala, in Upper Chandee.

35. There are several others not worth mentioning; but it may be observed that near Dehra, in the centre of the Doon, a very great depth is required, and towards the Ganges and Jumna it gradually diminishes. The well in the lines of the Sirmoor Battalion is 175 feet deep; it has one spring, and although it contains plenty of water in the rains, it has hitherto dried in the hot weather; it was dug two years ago by the Barrack Master. That in the Kucheree grounds is 228 feet in the whole; it was finished in the hot weather of 1826, and then contained $4\frac{1}{2}$ feet of water, and as this was the second of the extraordinary dry years, it probably never will fail. The water did not commence rising until the end of July, although the rains began early in June, and continued to rise until the 16th November, nearly two months after the rains had ceased, when it rose to its highest, there being $59\frac{1}{2}$ feet of water; it then commenced falling, but much more gradually than it rose. On the 21st April, 1827, there were 29 feet 8 inches of water: when it was at the lowest in 1827-28, it never contained less than 13 feet of water.

36. The mode in which this well was dug is worth describing. The first was begun after the rains of 1823, and had reached to a depth of 157 feet, when the *chota bursat* of 1824 (name given to rain which sometimes falls a month or six weeks before the regular rainy season) came on earlier and heavier than usual: the gabion work with which the interior of the well was lined, not being sufficient to support the moistened earth, the whole fell in. After the rains of 1824 a new one was commenced at about 30 feet distance from the old well, and in the hopes of reaching water before the next rains, a double party of men were engaged, and the work continued day and night; but by the end of March, 1825, when the depth was 160 feet, it was thought advisable to secure what had been done, and the masonry shaft was built up with a clear diameter of 9 feet. When this was completed, the digging was continued for about 25 feet, and a second shaft built to meet the base of the first. This was done during the rains of 1825, the depth being so great that that season had not sufficient effect to prevent the work being continued. A third, and afterwards a fourth shaft was constructed, each meeting the base of the one above it which was supported, while the new one was building, for all were of the same diameter.

37. It was supposed by several engineers who watched the progress of the work, that when water should be found, it would rise considerably, but this was not the case. The first water was found at 182 feet, a very small spring, so little as to lose itself in

dribbling down the sides of the well : at 210 feet a larger spring was found ; at 218 the diggers reached what appeared to be a bed of water, but it sunk as the well was deepened ; and it was not until the depth of 226 feet had been reached that the water amounted to four feet and a half. But as this was in April, 1826, after two dry years, and it was found impossible to diminish the water in any quantity by all the buckets that could be applied, this was deemed sufficient, and the result has proved it to be so, as above described. A platform of masonry was raised to a height of two feet, round the mouth of the well, making its total depth 228 feet ; yet the level of the ground, where this well is dug, is only 15 or 16 feet higher than that of the town well, which is only 88 feet deep.

39. The well was dug chiefly to supply the Jail, and those in attendance at the civil office. It is fitted with capstan and hand windlasses. By means of the former, four men will from a depth of 200 feet or more draw up about seven buckets per hour, each containing more than fifty gallons. The water is soft and peculiarly fine ; it is in great request among the men of the corps and of the surrounding villages, being fit for boiling the different pulses known by the name of *dāl*, which cannot be softened by boiling in the hard water of the artificial canal or of the well in the town.

40. The whole work was completed under the superintendence of the officer in civil charge of the district, and it is a curious circumstance that almost all the workmen were men who had scarce ever seen a well before ; the diggers in particular, who were all hill men, for those of the Doon were too timid to be persuaded to descend the well. They had to be taught every thing, even to make ropes with a machine, as till that time the only mode of making ropes in the Doon was by twisting them by hand. After a few trials with machinery on the English plan, they produced ropes 300 feet long each, scarce inferior to those of English manufacture. The capstan windlass proved an excellent contrivance. Before its erection, for it was constructed during the progress of the work, with nine men digging below, it required twenty-seven men to draw up and carry away the earth ; by the help of the windlass, with the same number below, nine men were sufficient : thus causing a saving of eighteen men, at 3½ rupees a month each, or 63 rupees per month ; while the cost of the machine was 120 rupees. Major Colvin, of the engineers, who had lately dug a well near Hansi at a cost of about 4,000 rupees, declared after seeing this windlass, that a similar contrivance would have diminished the expense of his well full 500 rupees. The well in the Doon, of which we are speaking, cost nearly 12,000 rupees.*

41. Three wells, one lined with masonry 96 feet deep, the others with wooden frames, have been dug in different villages by the people, a fourth is now in progress in a newly peopled village, at the expense of the engager. It would be very desirable to increase the number of wells, as being for drinking infinitely preferable to a stream. A well once properly made lasts for years, or even centuries, and gives good and clear water ; but a stream, if small, is often dirty, and from the immense quantity of jungle in the Doon, they are strongly impregnated with the effluvia of putrid vegetation ; if artificial, they are constantly requiring repair : many instances can be adduced from experience in this province of the utility of wells in preserving the health of the people.

TANKS.

42. The only two worth mentioning are those belonging to the Dehra temple establishment before described. There are, however, still visible the remains of a considerable

number, which were made by throwing a bank across a small hollow in the ground ; from the very old appearance of those near Dehra, they would seem to have been made before the artificial canal supplying the temple tanks, was dug.

ANIMALS.

43. Of the larger sort are elephants, which among the natives are considered a particularly fine breed. Tigers not so large or so fierce as in Bengal ; the average whole length of a good number, gave about 8 feet and half. Leopards, two sorts. One averaging about 2 feet 2 inches high, the other not above 20 inches ; a third, the cheeta, is also said to be in the Doon, but this is doubtful. The black bear with the white crescent on the breast, similar to that of the Himalayah, is not uncommon ; and the striped hyena is occasionally found : the wolf is unknown ; the people have not even any name for it, which is rather strange, considering that it is common in the neighbouring province of Suharunpoor, separated only by a range of hills. °

44. The elephants caught in the Doon, and particularly those of the Chandee province, are considered by the people as a peculiarly fine breed for riding elephants ; the Commissariat disapprove of them as being unfit for baggage animals ; this may be true, but it is very doubtful whether the Commissariat have ever made the experiment, simply because the usual price of these elephants is far beyond the sum allowed for those bought for the service of Government, particularly of late years. The Sikhs are the chief purchasers not only of the elephants caught here, but others brought from a distance ; and the increased demand for an article of luxury, such as riding elephants, indicates increase of wealth among the chiefs and landholders of the Punjab. °

45. The tigers and leopards are very numerous. The latter are much the most daring in coming into the villages, and even occasionally pushing open the mat door of a hut, from which they will take away goats and calves. They sometimes take their prey up a tree to devour it, or sit upon the branch of a tree watching for prey : they are said to attack men, which leopards certainly do in other parts of India, but it is very doubtful whether a well authenticated instance of their doing so in the Doon could be adduced, i. e. purposely by way of prey : they will do so in revenge when wounded, of which many instances have occurred. The number of men and cattle killed is but very small in proportion to the number of tigers and leopards, which apparently live chiefly on wild hogs and deer. In the course of six years no less than twenty-six tigers and leopards have been killed within four miles of the station of Dehra, some of them close to the town, besides abundance in other parts of the province. Wild elephants have been seen within four miles of Dehra, and bears sometimes cross the parade. There is not probably a station in India where large game is found so near as it is to this.

46. There is also the fox, like those of the plains, jackalls, wild dogs, wild cats, several sorts, one of which is very pretty, being like a leopard in miniature ; squirrels, (the common sort of the plains) weasels, which grow very large, bandicoots, monkeys, 2 sorts, bundur and lungoor, rats and mice, caracals, a species of lynx, the bejoo, a species of badger, one more species of civet cat, and several sorts of pole cats are common. One of the latter, called tooturaloo or kosiab, is a pretty, lively, animated creature : it grows to about three feet long, of which the tail is about half : the hair is tawny at the roots with black ends, so that as one or other of these predominates, the animal varies much, some

appearing tawny, some brown, and some almost black : the throat and upper part of the breast in all is tawny yellow, more or less bright. When domesticated, it may be allowed to run loose, and is the most playful animal in existence, being never still from day-break till dark. One of these was taken to England by Mr. Shore, and presented to the Zoological Society. The large fox of the hills, as big as that of England, is found on the Mussooree and Landour ranges; the tip of its tail is almost white.

47. Of game, are deer six sorts—the mähā or jurao, a fine large animal, with splendid antlers; khakur or ruttoo, a small red deer, about 20 inches high, with dog eye teeth and small curved horns, and makes a noise like a small dog's bark; the cheetul or spotted deer; the jhank, a large red deer with branching horns; para or hog deer; chikārā, a small deer with four horns. The natives mention an additional species—the dodur, a red deer, smaller than the cheetul, but these are rarely seen: it is something like the hog-deer, but when young is spotted with white; it retains a few spots when full grown. The roz and neelghace are found in the lower range of hills: the former name is applied to the male, the latter to the female. The goorul (so called by the English,) but the proper name would be gweldr, (the ldr being conglomerated into one letter at the same time that the sound of each was heard: none but a Welshman could hope to succeed) a species of antelope as large as a middle sized goat, of a brownish grey color, with short black horns, slightly curved back, is found on the Mussooree and Landour range, but it never descends to the valley. It may be observed that the same animal often has more than one name, some have a dozen, being differently named by the inhabitants of as many different adjoining petty provinces, it is in consequence ludicrous to hear the discussions among the half informed sporting gentlemen as to the correct name. There is perhaps none which has given rise to greater difference of opinion, or more fierce discussions than the word barasingha, which species of deer is the real barasingha. Now, whatever may be the case in other parts of India, in the Doon and hills there is no one deer to which the name barasingha is specially applied. The literal meaning of the word is "twelve tynes," and is applied to any deer that has fine branching horns: idiomatically translated, its most correct synonyme in English would be the vulgar term "wapper;" a native would exclaim "there goes a fine barasingha," just as an English peasant might call out "there goes a wapper," and this is the real and simple truth in the matter which has already wasted as much breath as would serve for all the tattees in India were the wind to lull for a month. The hare, porcupines, (which grows to a very large size,) and wild pigs, are common. The hog is not very large, and is rarely found in ground sufficiently open to hunt. Tigers are seldom found in places which will allow of their being pursued upon elephants, and are usually killed by men who sit in a tree to watch, or by large parties on foot.

BIRDS.

48. Birds of prey. Eagles three sorts—the black-headed, brown and fish eagles: common vultures and several smaller sorts, brown and white, which it is doubtful in which class they would rank: kites, hawks, crows and ravens.

49. Of game birds there is the peacock; one sort of pheasant (the kaliz); partridges, the black and grey; jungle fowl; quail several sorts; curlew, snipe, and wild fowl, are occasionally seen, and now and then a woodcock comes down from the hills after a heavy fall of snow. The kalij, which is figured in Kirkpatrick's Nipal, is the only pheasant found both on cool ridges as well as in the warm valleys. The golden green or impeyon, (the rusac or moonal of the natives, the former name being given to the

cock the latter to the hen bird) the koklas or fuklas (*phasianus pucrasia*;) and the cher (*phasianus stacei*) a reddish brown bird, with a long tail, spotted and barred with black, are found on the tops of the second range just on the limits of the Doon. That beautiful bird, the singhar churra (the horned pheasant of Latham), absurdly called by the English the argus, seeing that there is as much resemblance between the two as there is between a Guinea fowl and peacock, does not approach so near the valley.

50. There are many others, viz. parroquets two sorts, the red headed (the blossom headed of Latham) which is the male, the female having slate colored head, the bodies of both being green. A green one, with an orange and black ring round the neck, and one all green; these are also male and female. Pigeons, the green and common blue, while the kokla, with its beautiful mournful whistle, is found on the hills which rise just above the Doon. Doves four sorts, besides an infinity of small and large beautiful plumaged birds, which it would require a naturalist to describe. Water-birds are scarce, excepting a large species of black cormorant, of which there are great numbers in the spring on the Ganges and Jumna. A stray pelican sometimes makes his appearance. There are also three species of hornbill, one of which is rare; it is a splendid bird, with a horny crown on its head, and is called by the people the bun-rao, prince of the forest.

REPTILES.

51. Reptiles, or at least what are usually denominated such, although naturalists may class them differently, are common enough. Snakes of several sorts, particularly water snakes. The only poisonous one hitherto known is the cobra-de-capella, and that is rare. The boa is found in the woods and said to grow to an enormous size. The largest seen by anyone who can be depended upon, measured fifteen feet long and twenty-three inches in circumference. Frogs, lizards, guanas, and chamelions are numerous. Scorpions abound in certain places and seasons, particularly under the stones in the dry beds of streams. In the Kheree pass, in turning up a few stones, no less than ten were found one day. They are moderately poisonous, but in some of the narrow hotter valleys, within the hills, the poison is much more deadly, while those found on ridges five or six thousand feet high, are harmless. The leeches should be mentioned, which in the rains are found in the grass, and even on tress, as well as in water. They are a great annoyance to every sort of animal, as they get up their nostrils, and hanging on by a sucker at the tail, would remain for months unless taken out by man. By watching for the leech putting out its head when the animal drinks, it may be pulled out. It is supposed that they get up the nostril when very small and rapidly grow to their full size; for an instance occurred of a leech being found up a woman's nose. Had it been any size when it crept up, she must have perceived it at the time.

FISH.

52. The native fisherman reckon twenty-four sorts, of which those only worth mentioning are the gonch, a fish something in shape like the English miller's thumb, or "bull-head," but this grows to four or five feet long, and several stone in weight: it has several rows of small teeth in the upper jaw and one row of large teeth in the under; this is found only in the Gunga or Jumna. The mähâ-sheer, which grows thirty or forty pounds weight, and when small, i. e. from one to seven or eight pounds, gives the finest sport in fly fishing to be had perhaps in the world. What is extraordinary is, that such large fish should be found in abundance in streams not three feet deep. The sout about the same size as the mähâ-sheer. Some few small trout are also found.

INSECTS.

53. Are extremely numerous, and some very beautiful. Bees are found in the woods, but few people keep them. Sometimes during the rains the ground where it is swampy is perfectly illuminated by fire flies.

HEIGHT ABOVE THE SEA.

54. The following heights of different places in the Doon are taken from Captain Herbert's measurement. Temple at Dheree is 2,369 feet above the sea; Temple at Bamunwala, three miles from Dheree, about S.W. 2,220; Nalapannee or Kalunga Fort, 3,286; Nuwada village, on the hill of the same name, 2,364; Koonja, near the Jumna at a point $\frac{1}{2}$ of a mile east of the village, 1,618; Synpoor, 1,754; Tankat Sutheebag, 2,086; Mitteebooree, 2,189; Rekikes, 1,427; crest of the Timberpass, 2,339; crest of the Khoree pass, 2,985—these two are in the lower range of hills—Hurdwar, 1,024. The level of the valley falls from Dehra towards the Gauges and Jumna, and towards the lower range, and rises towards the second range of hills. Rajpoor, at the foot of the latter, and seven and half miles from Dehra, is probably 1,000 feet higher. The ridge of the second range of hills would average about 4,500 feet above Dehra. Budraj, the highest point in the ridge, is by the surveyors calculated to be 7,300 above the sea; a little behind this ridge lies another, that of Marmor, considerably higher, so much so as greatly to obstruct the view of the snowy mountains from the first mentioned ridge. Soor Kundee Debec, 16 miles, as a crow flies N. E. from Dehra and visible from it, is more than 9,000 feet high. The hill of the Chor, N. W. from Dehra, at a considerable distance, is more than 13,000 feet.

CLIMATE.

55. The climate of the valley partakes something of that of Bengal, but modified by being more elevated above the sea, and in a higher latitude; taking the year throughout, it is about seven degrees cooler than Benares. The cold weather commences a little earlier, and lasts a little longer than in the plains; but there are none of those very cold westerly winds in the morning, which are some times experienced there: the atmosphere contains much more damp. The rains commence a few days earlier and end about the same time; they are not much heavier but much more continued: in an ordinary rainy season there are rarely above two or three days together without rain. There are usually two or three days' heavy rain about the end of December or beginning of January, again in February, in March, and in the beginning of April; a shower now and then in May and June, during which months hail often accompanies the rain; the rains have been mentioned. Rain for a day or two usually falls about the end of October or beginning of November. In January and February, almost always, in March often, and some times in November or April, rain falls in the Doon. Snow falls on the second range of hills. It has been known to fall in the Doon: it fell and lay for a short time in the month of February, 1814, but this only occurs perhaps once in the memory of man. There are no "hot winds," but the sun in summer is excessively powerful; as a compensation for which, generally about sunset, a cool breeze sets in from the hills and lasts all night.

56. The following are taken from a journal kept by the civil officer in charge of the Doon. The year commencing from the 1st February, 1823, to 31st January, 1824, was an ordinary one. The second ending 31st January, 1825, and the third ending 31st January, 1826, were both unusually dry and consequently hot years. The fourth ending 31st January, 1827, was rather a wet year; so by taking the first, third and fourth years, a tolerable average may be made, according to which is the following:—

Months	1st February 1823. to 31st Janry. 1824					1st February 1825 to 31st Janry. 1826					1st February 1826 to 31st Janry. 1827					Average of the 3 years.		
	Days on which rain fell		No rain			Days on which rain fell		No rain			Days on which rain fell		No rain					
	Very Cloudy	Parti- ally	Very Cloudy	Parti- ally	Fine	Very Cloudy	Parti- ally	Very Cloudy	Parti- ally	Fine	Very Cloudy	Parti- ally	Very Cloudy	Parti- ally	Fine			
February..	4	5	3	7	9	7	3	3	12	3	3	0	2	11	12	Average of the 3 years.		
March....	3	3	3	11	11	3	1	3	13	11	5	5	2	14	6			
April.....	1	2	3	7	17	0	4	0	4	22	2	5	3	9	11	Rainy days	No rain but cloudy	Fine
May.....	3	3	2	4	19	6	1	2	5	17	2	7	1	12	9			
June.....	1	3	7	7	12	3	6	3	5	13	17	5	1	5	2	112½	126½	126½
July.....	18	12	0	1	0	11	11	1	8	0	16	11	1	2	1			
August....	15	12	0	4	0	8	13	0	10	0	13	11	3	4	0			
September	4	13	1	3	9	3	10	1	13	3	8	4	4	7	7			
October...	1	2	2	6	20	0	1	3	12	15	0	3	1	19	8			
November	3	0	0	7	20	1	0	3	5	21	1	0	3	4	22			
December.	1	2	4	12	12	0	0	4	7	20	4	0	5	15	7			
January..	1	1	4	12	13	0	3	7	7	14	5	2	4	6	14			
	55	58	29	81	142	42	53	30	101	139	76	53	30	108	98			
	113		110			95		131			129		138					

Unfortunately no one in the Doon has a pluviometre, or probably the difference between the quantity of rain fallen in different years, would be rather more than appears by merely comparing the number of days on which it fell ; on the whole the climate is much more damp than that of the plains, and to this dampness and continued cloudy atmosphere, in the rainy season, and occasionally so throughout the year, more than to the quantity of rain that falls, it may probably be attributed that the various sorts of rice thrive so well. During the hot weather there are many days in which a fleecy haze, partially or totally covers the atmosphere : this, although sufficient to prevent some fruit from ripening, is not such as to be called clouds.

In consequence of a rainy squall coming on suddenly in the hot weather, the transitions are sometimes very great and sudden : several times has it been seen to fall 7 to 9 degrees in half an hour, and on one occasion of this sort the thermometer fell 23° in one hour.

57. Thunder is much louder than in the plains ; lightning often falls. During the last four years not less than five houses have been burnt from that cause, in and about the cantonments at Dehra, where it seems fall more than in any other part of the Doon. Concerning lightning the people in Gurhwall bordering on, and in some parts of the Doon, have an extraordinary idea, that if any person standing close to a spot where lightning falls, should be able to throw water on it, it would then be unable to rise to the heavens (which they believe it to do) and the person would find on the spot a lump of gold, about a cubit long, and as thick as a man's arm. Earthquakes happen occasionally ; they are usually very slight, and that in July, 1803, is the only very severe one on record ; part of the Sikh temple was thrown down and many of the walls cracked, which remain so to this day. The thunder storms which usher in the rains, are very sublime, and there is perhaps no grander sight than to stand on some part of the Mussooree range on which the sun is shining, and to witness a thunder storm either in the opposite range of Marmor, or in the valley below. At times the clouds cover the whole valley like a sea, while ever and anon the tops of the lower hills appear like so many islands. At the same time the lightning is flashing as bright as the sun for the moment in zig-zag streaks, which seem to reach to the heavens, and the thunder rolling in far louder peals, and of a different description of sound than is heard in England.

What with the reverberation from the hills, and the rapid succession of the claps, it may be heard sometimes in an uninterrupted roll for two or three hours together. At others, it begins at an immense distance in murmurs of a few seconds each, and at a few minutes intervals, as the storm approaches, the peals encrease in frequency and loudness, till when over the spectator's head, the repeated volleys of a hundred cannons would fall short of the roar of the heavens : after which the storm retreats as gradually as it approached. The peculiar sound of the thunder is worth noting. It sometimes has the sharp sound of the word "crack" if one could fancy it pronounced with the loudness above mentioned ; at others, it has a hollow clanking sound, as if an enormous bell was struck at the same time that a round of artillery was fired, and the long rolls have the sound of what one may imagine would be caused by a succession of enormous avalanches.

58. The cleared parts of the Doon are healthy enough, but the jungly parts are very much the contrary. A register of the thermometer has been regularly kept for more than a year. It is taken five times a day, viz., at just after day-break, at 10 A. M., at 12, at 3 P. M., and at 10 P. M. It may be observed that in some months the average of the observations at 12 is higher than of those at 3 P. M. The following general average is deduced from observations at four periods, viz., of the coldest, i. e. just after day-break of the hottest weather at 12 or at 3 P. M. which ever should be so, of 10 A. M. and 10 P. M.

General average.			Table showing of each month.			
				Highest	Lowest	Difference
1826	August	78½	1826	August	90	72
	September	78		September	91	66
	October	73		October	86	61
	November	64		November	70	44
	December	56		December	71	42
1827	January	53½	1827	January	63	37½
	February	59½		February	73	45
	March	65½		March	86	48
	April	73½		April	93	53
	May	82		May	98	64
	June	84		June	101	71
	July	82½		July	94	72

Average of the whole year 70½.

Highest 101 on the 7th June at both 12 and 3 P. M.

Lowest 37½ on 4th January at day-break.

Greatest difference 63½.

Average of the year 1827-28

Of the whole year..... 70½

Highest..... 102

Lowest..... 35

Great difference..... 67

N. B. The greatest difference of the average of any one whole month from the corresponding month of the preceding year was 2½ degrees.

SOIL.

59. The soil is, generally speaking, good, some of it very rich; and even spots which appear to full of stones as to be absolutely useless, produce very fine crops : this is the case near Jakkun. It appears to be a mixture of black earth, clay and sand, but I am not sufficient of an agricultural chemist to describe it scientifically.

FORESTS.

60. For timber trees are immense tracts of sal or sakoo, some of it very fine ; some toon, fine and large ; sheeson, or sissoo, the grain of which is coarse, nor does the tree ever grow very large. Whether this may be attributed to the soil and climate being unfavourable to the tree, or to its being cut down to burn lime,—for as all the sheeson trees are on the banks of streams abounding in lime-stone, it is nearest at hand for that purpose,—is worth enquiry and experiment ; the khyr, a heavy red-wood, used for the pestles of sugar-mills, and from which the khut or terra japonica is made, is common enough : it is a tree which ordinarily grows to about twenty feet high, with a stem of about a foot diameter ; but they are sometimes found larger ; its branches are well covered with strong crooked thorns. The mode of preparing the khut is by cutting the wood into very small pieces or chips, which is soaked in water and then placed in small earthen pots in circles, one above the other, with a fire in the middle—the water is evaporated by boiling when the residuum forms the khut.

61. The dak, syjna, a large tree, the wood of which smells like horse radish—when young the roots are used to pickle—sirisa, a tree something like the sal, and numerous others are found. The gigantic creepers which are seen all over the forests, should not be omitted : some of these are 40 and 50 feet long, without any intermediate support, and measure nearly 3 feet in circumference. They are perfectly soft and would lie on the ground without support, consequently it is difficult to conceive how they came into such positions,—the name of one of the largest is the maljun ; the cheer, a sort of coarse fir, is found on both ranges of hills, but not in the valley itself ; few are to be found above a foot in diameter, although it grows much larger in some parts of the hills ; its wood answers for rafters, or to make coarse boxes, provided it be kept from the wet, which soon causes it to decay.

FRUIT TREES.

62. The wild fruit trees are the pear, goolur, fig, blackberry, white raspberry, kurundu, lemon, strawberries, and possibly many others : of these the blackberry and white raspberry only are eatable, and these are inferior to an English blackberry, but the lemon has a most delicious aromatic scent. The planted fruit trees are chiefly those common to the plains. The following are usually finer, viz., pomegranate, lemon, guava and plantain ; the apple, mulberry, orange, lime, loquat, plumb, greengage, jack, are as good as in the plains ; peaches, grapes, strawberries, mangoes do not seem to thrive : the latter probably would were it grafted and care taken of it, but no one seems to do so, and the trees now existing are very old. Cherry, apricot, walnut and some others are brought from the hills, but do not prosper.

VEGETABLES.

63. The common native vegetables, such as onions, metee, palig, sou, a large radish, chowlyee, bootá or banjun, raintooree, urundá tooree, toorur, a sort of yam, seem to thrive well as also the kuddoo, al, and chuehindā, which are of the melon kind, and usually are planted so as to spread over the roofs of the houses. The return from all sorts of English vegetables has hitherto been so poor, both in quality and quantity, as

to render them hardly worth planting. Potatoes are very poor, and, indeed, those grown in the Mussoree range and in Jaunsar are far inferior to the produce of Futtehghurh or Patna; their only advantage is that they ripen two months sooner; and it is considered a treat to get the new potatoes at a time when the old ones are scarce eatable.

64. The soil and climate of the Doon is apparently so favorable, that were any one to make the attempt who understood agriculture and gardening, both practically and theoretically, it is probable that the productions of both cold and hot countries would be found to thrive. The moisture of the climate is very favorable to many plants. The small Bengal plantain, for instance, which requires great care even at Suharunpoor, itself a moist place compared with the centre and lower Doab, flourishes in the Doon without either watering or manuring. From four stems received in December, 1823, in five years more than a hundred had been produced: the fruit was extremely fine, although longer in coming to perfection than in Bengal. One drawback to horticulture is the extreme luxuriance of the vegetation: on a peach tree, pruned in December, many of the new sprouts were by the end of the succeeding rains as thick as a man's wrist. A bamboo in about five months has been known to grow more than six feet; some sissoo trees planted in the rains of 1823, then about two feet high, by Mr. Shore, in the Khucheree ground, flourished well, and in five years grew to more than twenty feet in height, the stem being as thick as a man's thigh. From this it may be inferred that the reason why few large sissoo trees are found in the forests alluded to a little way back, is that they are cut down to burn lime. During the cold weather English vegetables and some other plants are stunted by the want of sun, occasioned by a constant fleecy haze, and no sooner does the warmth of spring revive them, than they run up to seed. It is probable that art would obviate all these defects and cause the production of both hot and cold climates to thrive in the Doon.*

SHRUBS AND FLOWERS.

65. There are a great variety of shrubs, among which are numerous thorny ones. The nettle grows into a bush 10 or 12 feet high, and would yield sticks nearly as thick as a man's wrist: if the young sprouts are eaten. Of flowers, there are many sorts, among others the violet and primrose are common. The general beauty of the scenery of the Doon strikes every one who enters it, whether he come from the plains, or from a tour of any length in the hills. In the former case, the traveller is struck by the hills being well clothed with trees, which surround him, forming a strong contrast to the monotonous level he has just quitted; by the verdure, the richness of the foliage, and by the beautifully clear streams running over beds of gravel or pebbles. In the latter case, after toiling over the most rugged paths the eye is gratified by the almost level soil of the valley, and by the richness of the cultivation in those parts, which bear the mark of the hand of man. The various color of the foliage of different sorts of trees, adds much to the brilliancy of the scenery, and there is not perhaps a finer forest view to be found any where, than presents itself on looking up the Ganges, from the hill above Hurdwar, about the beginning of April. At that season the sissoo trees which cover the islands with which the river is studded, are arrayed in their spring dress of the most beautiful light green: the forest of sal, on the other hand, which clothes the range of hills rising on the opposite side of the river, has not yet shed its autumn livery; the leaves display every tint between brown, tawny, yellow and red, and the contrast is one of the most brilliant that can be imagined. Were there but cultivation and the habitations of man on the level between the river and hills, the scenery would be perfect.

66. On ascending the second range, or grand hills, all is changed: there is little deserving the name of beauty; all is grand and sublime, a mass of stupendous ravines on a gigantic scale. No distinct ranges, but an ocean of rugged mountains, some bare and rocky, some clothed with grass, and others covered by the finest trees, above which the white peaks of the Himalayah, wrapped in their eternal snows, shoot up into the very heavens. It requires sometime to accustom the eye to understand the gigantic scale of these mountains: a gun is fired, and the sound scarce reaches a quarter of the distance to a peak from which the sportsman expects the echo: ridges that seem but a mile or two off are two or three day's journey distance, and on asking what are those blueish spots and ants on the opposite ridge, one discovers them to be the slated houses of a village and cattle grazing around. It is in such scenes as these that the nothingness of man is displayed. The very eagles soaring from their airy, and in a few minutes settling on a distant ridge which it would take a man a whole day's toil to attain, seem of a superior nature; and one is no longer surprised that an ignorant and simple race should in imagination have peopled almost every peak with a deity. On ascending one of these ridges from the warm valley below, the pure and bracing nature of the air inspires an elastic buoyancy of spirits that would indulge itself in almost childish glee and gambols; but the sunset presents the most peculiar view. As the day declines, the low vallies are first cast into deep shade, while the ridges are still smiling; these are gradually covered by shade, and the snowy peaks alone retain their tints of delicate rose colour; a few minutes more and these are changed to the most death-like paleness, exhibiting as strong a contrast as may be imagined in a human being in the height of health and beauty suddenly becoming a corpse.

AGRICULTURE.

67. The land is ploughed from once to seven or eight times; manure is used for sugar-cane, and sometimes for rice. The chief crop is the khureep or sâounec, of which the grain most sown is rice. The first sort is sown only in beds which can be irrigated, at different times, from the middle of March to the beginning of June. The calculation is three seers * per bigga of the land into which it is to be transplanted: probably 150 seers per bigga are sown in the beds. It is transplanted from the beginning of June to the middle of August, to compensate for which trouble, that of weeding is saved, so that on the whole this sort is considered the most advantageous; but only choice portions of land are adapted for it. Nine men will transplant a puka bigga in a day. The second sort is sown in the end of March or beginning of April, in fields, like wheat. For this the land is ploughed on an average twice or three times. The third sort is sown in the beginning of July or as soon as the rains have well moistened the ground; large fields are chosen for it, in which embankments are made to retain the water a few inches deep in beds: one ploughing is sufficient. The seed is first soaked in water for three or four days, then rolled up in balls of the sôomaloo bush leaves, the fermentation of which produces considerable heat, (mangoes and plantains are often ripened in this way) for as much longer; when the grains begin to sprout, they are then thrown into the above mentioned beds; after about twenty days, the crop is harrowed, which renders it more abundant and destroys the grass.

68. Mundooa is the next in quantity, and is sown: one sort called doolia, in the end of May, the other called bhatrooa in the end of June; for it the land requires five to eight ploughings.

69. The second sort of rice, and the mundooa, require weeding; the former twice. For this the owners of thirty or forty different fields join together, and making a long line weed each others fields in rotation, with music, composed of drums and a sort of hautboy to cheer them; the owner of each field in his turn pays the musicians. Almost every man is provided with an umbrella made of strips of bamboo and thatched with dry leaves.

70. The rubbee or sarce crop is inferior in quantity to the khureep; but every year more and more land is devoted to it, which is advantageous, as wheat contains much more nourishment than the khureep grains. For wheat and barley the land is ploughed from five to eight times; the other grains are sown in small quantities.

71. The following table shows the average produce of the different grains:—

KHUREEP CROP.

Grain.	Seer per bigga required for seed.	Produce per bigga in seers.	How many fold. a'	Average price per rupee pucha seer.
Rice, 1st sort.....	3	200	77	35
2d sort.....	13	240	18	40
3d sort.....	5	160	32	35
Mundooa.....	2	160	80	50
Ord.....	2	80	40	25
Koolut or Gahat.....	2	40	20	30
Jungoora or Sonk.....	2	80	40	50
Oil Seeds.				
Til.....	$\frac{1}{2}$	40	80	30
Tooreew.....	5	85	17	35
Rubbee.				
Wheat.....	13	120	9 $\frac{1}{2}$	35
Barley.....	10	240	24	40
Gram (Chuna).....	10	160	16	35
Galdá.....	5	80	16	60
Mussooree.....	5	80	16	35
Oil Seeds.				
Ulsee.....	5	40	8	30
Serson.....	2	80	40	35

Where there is convenience for irrigation, it is used for the rubbee occasionally; but in an ordinary season, what rain falls is sufficient. Manure would doubtless improve it greatly, but although in many villages they have abundance from their cattle, their apathy prevents their taking the trouble to make use of it. Oats have been sown by a few English gentlemen and succeed tolerably well. The wheat straw is not so long as that which grows in the plains.

72. In the khureep crop, juwar, bujra, mukkas, (Indian corn) copas (cotton,) and some others are sown in gardens in small quantities. A grain called tor, which in appearance is like the urdur of the plains, is sown in some places in the ground from which mundooa has been cut. One ploughing is sufficient: it is sown in the end of February or beginning of March, and reaped in the February following; a little sugar cane is also planted and sugar is made from it; the process is similar to the plains, but it does not appear to thrive well.

73. The "keel" cultivation should be described. It is made on the steep banks of ravines or hills, which are covered with underwood, and is practicable in the same place once in from six to twelve years. The underwood is cut in January and left to dry: in the end of April it is burnt, and the ashes form the manure. The grain is then thrown on it, as the steepness of the ground would prevent any ploughing or harrowing. Mundooa, moog, marsu, and some others are the grains thus sown; sometimes two or more mixed together.

74. The most ordinary routine of crops, if the land is good, is rice;—the second sort sown in the beginning of April, and cut in the end of August or beginning of September. Then wheat sown in the end of October or beginning of November, cut in April and May. Then til sown in the middle of June, cut in October or November, after which the land lies fallow till April, thus giving three crops in two years. Some rich land will yield two crops annually of rice and wheat. Some land is kept entirely for the rubbee, and others again for the khureep: this is more probably from the, in most villages, large quantity of land in proportion to the people. Usually in breaking up grass jungle land, mundooa is sown for the first crop, sometimes rice; in which case the ploughing is commenced some months before the sowings. If the land be broke up for the rubbee crop, wheat is the first grain sown.

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75. The people have an admirable plan of fencing in their fields, which border on the high road, or a jungle inhabited by deer, with a hedge of dry prickly bushes; this prevents much loss, and all complaints and quarrels about trespasses of cattle (of which there is so much in the plains) and by saving them in a great measure the trouble of watching their crops, allows them to work as labourers between the sowing and cutting of the wheat. It is a pity they could not learn to make living hedges, for which the soomaloo bush to be found every where, is admirably suited, as it may be treated like the English quick-set and does not require watering: but although the English gentlemen at Dehra have set them the example, by showing practically how to do it, none have imitated it. It would not take more trouble the first year, about half as much in each of the second and third, and not a fourth as much in every succeeding year, as it requires annually to make the dry thorn hedges; and the trimming the living hedge would at the same time afford fire-wood.

CATTLE.

76. The cattle are perhaps rather smaller than in the plains, and of all colors,—chiefly white. The average price of those of the poorer cultivators, is 20 Rs. a pair; the richer have them worth 40 Rs.; these are procured from the hill men, who buy the year old calves from the Doon people for 5 or 6 Rs. each, and taking great care of them, re-sell when full grown to those from whom they bought them, often for as much as 40 Rs. a pair. This is an excellent mode of turning to use the surplus grain of the hill villages, for which from the want of roads there would otherwise be no market. On a rough estimate the cattle in the Doon may be 30,000; buffaloes 3,000; some of the people keep horses for their own riding. There are now about 100 carts in the Doon. Of goats, there are few, both plain and hill goats seem to thrive well; numbers of the former are brought up weekly to sell for food in the Sirmoor Battalion lines, as the Goorkas and hillmen are as fond of animal food as the English. There are also a few sheep: the plain

sheep thrive well enough, but those from the hills require great care at any time and then rarely outlive a rainy season.^b

WATER MILLS.

77. Some portions of grain are ground by hand, but by far the greater part by water mills, called gurât or punchukee. These are composed of two stones, and a wheel on which the water falls, all fixed horizontally. The stones are from 2 to 3 feet diameter; the under one, which is fixed, is a foot or a foot and half thick; the upper, which moves with the water wheel, is not much more than half that thickness. With a fall of water 10 or 12 feet, ten mun pakhee (a mun is 80 pounds avoirdupois) may be ground in a day or night. Some are even on a scale large enough to grind 20 or 25 muns. The price paid for grinding is usually two seers per mun. One boy is sufficient to attend a water mill. The cheapness of grinding by these mills is strongly exemplified at certain seasons when wheat is brought up from Suharunpoor to supply the Dehra market. The distance is forty-four miles, and notwithstanding the expense of carriage and the shop-keeper's profit, the flour at Dehra is sold at nearly the same price as it is at Suharunpoor, where the corn is ground by the hand.

MINES.

78. There are none; but the remains of some iron mines are extant, near the village of Kutter Putter, near which the Jumna enters the Doon. They never were of sufficient consequence to yield a revenue to Government, but were occasionally worked at leisure hours by the people, who held the village: this has been deserted many years.

ROCKS.

79. Of the lower range the rocks are chiefly sand-stone; here and there large lumps, and even beds, of conglomerate or pudding stone, excessively hard. The second range is chiefly composed of clay-slate: a chalky sort of lime or whitening and many other descriptions are found there, but this requires a geologist to describe properly. Gypsum is found in large lumps near the dripping rock. There are some particularities in the lower range of hills worth noting. The crest of the ridge is in some places composed of heaps of round smooth stones, from the size of a man's fist to that of his head, imbedded in a substance that appears like a mixture of sand and mortar, so hard as to wear the best steel pick axes to the roots in a week in cutting through it. At the crest of the Kherree pass this composition is found in a large mass: it has been cut through almost perpendicularly, yet remains like a wall without falling for one or two seasons, after which the combined effects of exposure to the atmosphere and rains causes it to begin crumbling away. These rounded stones may be found imbedded sometimes singly, sometimes several together, deeply in the sand-stone rock, the formation of which appears to be continuing. The exterior portion of this sort of rock is generally tolerably hard, while the interior is soft; this, however, gradually hardens on being exposed to the atmosphere; the progress is fairly perceptible from year to year.

80. • The strata, of which the valley is composed, seems to contain a great variety of soils, as may be gathered from the following statement of different kinds met with in digging the well in the Government office ground at Dehra.

Particulars of the strata observed in sinking a well shaft about half a mile south of the town of Dehra.¹

<i>Feet.</i>	<i>Total</i>	<i>Description.</i>
5	5	Fine black mould with a few stones.
4	9	Reddish earth, mixed with gravel.
9	18	Loose sand and gravel, large stones mixed.
2	20	Loose sand and gravel, mixed with reddish clay.
3	23	Stiff reddish clay.
8	31	Stiff yellow clay.
3½	34½	Sand and gravel, mixed with a little red clay.
1½	36	Stiff reddish clay.
2	38	Sand and gravel.
22	60	Stiff red clay.
2	62	Clay, sand and gravel mixed.
16	78	Sand and gravel.
12	90	Stiff yellow clay, with a little sand.
35	125	Sand and gravel with a few round stones.
3	128	Ditto, blocks of conglomerate on the north and west side.
3	131	Sand and gravel.
13	144	Sand and gravel, with tolerably sized stones.
5	149	Ditto ditto, stones larger.
9	158	Ditto ditto, with pieces of conglomerate.
4	162	Ditto ditto, with enormous stones, some of them more than a yard cube.
6	168	Conglomerate on 3 sides the west, north and east, gravel 4th.
3	171	Sand and gravel, moist occasionally with pieces of conglomerate.
3	174	A bed of conglomerate all over the well.
3½	177½	Layers of sand and gravel, and of conglomerate, alternately, about six inches thick
4½	182	Sand and gravel.
½	182½	A bed of conglomerate, four inches thick, under it water but scanty.
2½	185	Sand and clay.
½	185½	Conglomerate, a bed or layer about four inches thick.
18½	204	Sand and gravel, rather loose occasionally : pieces of conglomerate, occasionally solid blocks 160lbs. in weight.
5	209	Sand and gravel very moist ; small pieces of conglomerate.
	209½	Conglomerate over half the well, under which water was found.
	211	Red clay.
	218	Sand and gravel, very moist, mixed with conglomerate, a considerable spring found.
3½	221½	Blackish clay, with angular fragments of clay slate.
1	222½	A layer of conglomerate.
3½	226	Gravel.

MANUFACTURES.

81. There are but few manufactures in the Doon, and those very poor. Some blankets, cotton cloth, mats, and baskets and earthen pots comprise perhaps the whole. The potters understand the use of the wheel. Almost the only artificers are carpenters and blacksmiths, who can do little more than make articles of husbandry. In Dehra, of course, are one or two tolerable good workmen. There are few goldsmiths ; only one brazier. The people make a very useful sort of cloak of dried leaves, pinned together with thorns, called a moonkee : these are used chiefly by the peasantry when employed in their agricultural pursuits. Umbrellas made of the same material, supported on a light cane frame, are sold for three pice each : a better sort of umbrella, covered with the birch bark, and ornamented with peafowl feathers, sells for from eight annas to two rupees. There are one or two blacksmiths attached to the bazar of the Sirmoor Battalion, who can make the kookree or crooked Nipal dagger, as well as the boojall, or

khara, a weapon something between a sword and bill hook ; but the workmanship is very inferior to that of Nipal. The scabbards of these weapons are very neatly ornamented by long thin strips of the quill part of the peacock's feather : this is worked into the leather in flowers or other fancy patterns : it is sometimes done so neatly and finely as to appear like thread.

82. A few boats are built on the banks of the Ganges and Jumna, and carried into the plains for sale.

COMMERCE.

83. The commerce of the country should be divided into two heads, that between the Doon and hills, and between the Doon and plains ; it is, however, difficult to draw the precise line, because much of what is brought from the plains, is both for the Doon and hill consumption ; and part of what comes from the hills is for the plains as well as the Doon.

84. The produce of the Doon carried to the plains, consisted of timbers, bamboos, limes, khut (terra japonica) rice, sometimes other grains.

85. The Doon receives copper, brass and hard-ware, cotton cloth, some blankets, salt, the bodarce sort from Samur, sugar, both kund and goor, tobacco, dried fruits and spice, and usually at one season of the year wheat.

86. To the hills are taken brass, copper, and hard-ware, cotton cloths, sugar (goor only) salt, fine blankets, coarse ornaments and pewter for making them, and spices.

87. From the hills are brought coarse blankets, rice, ginger, turmeric, red pepper, hooka pipes, (made of a reed called rungal) booj (birch bark) honey, wax (these in small quantities) lak, gum, resin and many sorts of roots, mosses or other substances, used either in dyeing or in medicines.

88. The people estimate the trade of the Doon, exports at forty-five or fifty thousand rupees, and imports at about double that ; but it is obvious that such guesses are very little to be depended upon, particularly as the above contains a fallacy either in the amount of goods or in their value, since it is impossible for any country or province for a continuance to import so much more than they export. It is probable that the whole trade of the Doon of every sort does not exceed 200,000 rupees, and that the imports from the plains do somewhat exceed the exports, on account of Dehra being the headquarters of the Sirmoor Battalion, to pay which requires about 50,000 rupees in addition to what is derived from the revenue of the provinces after paying the civil establishment. This is annually brought up in cash from Suharunpoor, and part of it finds its way back in the purchase of sugar, salt and other produce of the plains, required by the men of the corps. The establishment of the convalescent dépôt at Landour, will of course cause a considerable influx of capital, and corresponding benefit to the province.

89. There is no doubt that the exportation of grain from the Doon to the plains might be greatly encreased, and will be, unless the convalescent dépôt be greatly encreased so as to consume the whole, which is much to be desired, as the Doon as yet has only agricultural produce to give in exchange for other commodities ; but as if to check every attempt of the inhabitants to rouse themselves from the apathy into which they

had fallen, until an English functionary resided in the Doon, the native officer in charge of the revenue, prevented grain being exported, for fear it should become scarce in the Doon. However, a parallel instance might be cited of an English civil functionary having the same notions.

90. There is a curious fact worth noting, which without some explanation would seem erroneous, viz., that grain is at one season of the year carried from the Doon to the plains, and at another brought from the plains to the Doon, although the market price in the plains may be, and usually is, higher at the latter time than at the former. The explanation is, first, the want of capitalists in the Doon; second, that the population is almost entirely agricultural; and, thirdly, that the same individuals who sell are not those who rebuy at Saharanpoor. At the harvest the landholders and cultivators reserve grain enough for their own annual consumption, for seed, and usually a little to sell in retail; the rest they are obliged to dispose of at once to enable them to pay their rent, but small as the consumption at Dehra is, the capitalists who deal in grain are unable to store more than enough for a portion of the year's supply, and it is carried to the plains for sale. When the stored grain has been consumed, the shop-keepers, who supply the bazar, are necessitated to procure more from wherever it may be obtainable. The hills supply enough of the autumn grains, rice, mundooa, &c., while those of the spring crop, wheat and barley, are brought from Saharanpoor. None of the agricultural class supply themselves from the bazar, nor do the whole of the sepahces and gentlemen's servants at Dehra, but a portion of these classes; and the explanation of this may be given as a reason why there has always existed some difficulty in keeping up a good bazar for the ordinary food of the people, either in the town of Dehra, or in the lines of the Battalion.

91. The Sirmoor Battalion, although from its origin called a Goorka corps, is now chiefly composed of men from the adjoining hill provinces, many of whose homes are not more than from one to three days' journey distant from Dehra. These are supplied with grain by their relations, to whom in return they give part of their savings; others buy it a mun at a time from the neighbouring landholders at a cheaper rate than they can get it in the bazar, and the only class who deal regularly with the shop-keepers, are the spendthrift sepahces and servants who never possess any cash, but who take their month's supply on credit, and pay their bills on the issue of pay.

92. The mode of conveyance to the plains is chiefly by carriage cattle, bullocks, poney, and some few camels. A very small proportion of goods are conveyed by men. Carts are only as yet used for conveyance of the jungle produce to the plains, and almost the whole of them belong to merchants from that part. Hill produce is brought to the Doon entirely by men. The greater part of the timber is floated in rafts down the Ganges and Jumna—Luckee-ghat on the former, and Raj-ghat on the latter, are the chief points of embarkation. The rafts are made very long and narrow for the shooting down the rapids, which extend in each river for some miles after they deboucho on the plains. These rapids are so shallow and stony as not to admit the passage of the smallest laden boat; but flat bottomed boats, which are built within the Doon, can be taken down to the plains with great care and trouble. The size of the boats usually built is probably equal to about ten tons of our measurement; thirty or forty men walk along the bank, restraining the impetus of the boats by means of long ropes, and thus they are allowed to drop slowly down. It would be possible with some fifty or sixty men to drag a boat of the above size up the rapids, but it is rarely done. It is a curious circumstance that the name for a rapid should be quite different on the Ganges and Jumna; by the raft men,

of the former it is called gulla, by those of the latter bhegur; each name is quite unknown to those who use the other. Quere. It is possible that among the migrations that have taken place in India, the ancestors of the raftmen on each river could have come from different parts of the country.¹

93. Near the jungly villages of the Saharunpoor district, under the lower range of hills, about 1,500 Brinjaris reside, possessing about 15,000 bullocks; they chiefly gain their livelihood by transporting the jungle produce, on their own account, but are ready to hire out their cattle to any body who wants them; some of these, in particular three fine old men, who live near Imlec, were with Lord Lake in his campaign in the Punjab. The usual hire of a poney to Saharunpoor is one rupee for the trip; of a bullock eight annas.

94. The Dehra merchants deal chiefly with those of the town of Saharunpoor: those of Jhano, Bhojpoor and Rekikes, deal with the Kunkul merchants. A hoondie, or native banker's draft, could not be procured in Dehra or any other town but Saharunpoor.

95. The trade from Hindoostan to Kashmeer at one time passed through the Doon. The disorders in the Punjab and Saharunpoor, consequent on the breaking up of the Mogul empire, stopped the usual channel of trade by that route, and obliged the caravans to go by the hills. They started from Nujeebabad, passed through the Chundee Purgunnah, crossing the Ganges at Luckur-ghat and thence to Dehra, and quitted the Doon after crossing the Jumna at Raj-ghat, from whence they proceeded up the Kcarda Doon to Nahun and through the hills. When Forster passed up in 1782, the Chandee province belonged to Sreenugur, and Lal Dhang, at the very foot of the hills, was the residence of an officer, on the part of that Government, stationed to collect the toll; the caravans consequently went from Nujeebabad to Lal Dhang, and thence through the Deleghata, a pass in the Kanec hills, which divide Chandee. At that time the Sreenugur Government was not strong enough to protect the caravans from the chance of plunder; and black mail, under the name of hiring a guard from them, was paid to the different tribes who inhabited that part of the country. It is curious that between Nujeebabad and Luckur-ghat, a distance of about 50 miles, it was necessary to propitiate no less than four different tribes—the Goojurs, Bok-sas, Herces, and Mheras. Shortly after this the Chandee Purgunnah was seized by the Nuwab of Lucknow, and then the caravans travelled direct from Nujeebabad via Kaneca to the Deleghata; under this Government the black mail system is said not to have been carried to quite so great an extent. Usually one caravan left and arrived annually. The beginning of February was the time of leaving Nujeebabad: that from Kashmeer usually arrived at Nujeebabad at the beginning of June, sometimes it was delayed on the road, halted at some intermediate place during the rains, and came down in the cold weather. From some reason or other the progress of the kafile seems to have been exceedingly dilatory, halting for several days after only two or three journies. This was probably partly occasioned by making arrangements with the tribes through whose territory it was to pass, and for the convenience of trading at different places on the road; but at many of these, the delay seems to have been unnecessarily great. The caravan with which Forster travelled left Nujeebabad on the 14th February, and was nearly a month before it quitted Dehra; the distance between the two being only eight moderate days' journey. The kafiles by that route were even then rapidly diminishing, in consequence of the Punjab becoming more settled, and about the year 1793 altogether deserted the road by the hills.²

CURRENCY.

96. The common Furruckabad rupee is the one current; a few of other sorts are occasionally met with, viz., an old Bareilly and old Furruckabad, a Nanik Shahee, Lucknow, Putialce, each of which are valued at half an anna less. The Mahomud Shahee is taken even. A Sunnee rupee, an old Mahratta rupee, coined at Saharunpoor, at 1 anna less, a Jugadree rupee, at 2 annas less, a Juma Shahee rupee, which comes from the westward, at only 11 annas. The Calcutta gold-mohur sells for 18 or 19 rupees; pice at from 50 to 65 per rupee; cowries at 80 a pice; the Timashee, a small silver coin, current in the hills, at the rate of five for a rupee, or rather more than three annas each, but intrinsically scarce worth more than two annas, is seldom seen in the Doon.

WEIGHTS.

97. The mode of weighing grain or other articles, is similar to the plains by *mun* and *seer*; the *seer* is 84 rupees.

INHABITANTS.

98. There is such a mixture of different races in the Doon as to render it impossible to give any general description. The Rajpoots, who call themselves Rangurs, apparently are the oldest inhabitants. With Najceboodoulic, many Mussulmans settled here, many hill people have at different times taken up their residence. When Rajah Ramdial, of Lundhoura, had great influence in the Saharunpoor district, under the Marhattas, and held a jagheer in the Doon, to bribe him to prevent his people from plundering it, a considerable number of Goojurs found their way up. Here and there a Sikh is met with.

99. Their personal appearance seems more to depend on the part of the valley in which they reside than on their extraction; those in and about Dhera, which is clear from jungle, are rather tall, particularly the Rangurs, stout looking men, but dark. Those in the jungly parts are squalid, thin, sickly-looking, with very often large stomachs.

100. There are, or rather were, two tribes in the province of Chandee, which deserve some notice: the Boksas and the Herees. The former are Hindoos, and claim to be Rajpoots from some part of the Jyepoor territory: they deserted their homes between two and three hundred years ago, and settled in the Terai of Rohilkund, from Chilkeea up to the borders of the Doon. Their constitutions have become acclimated to the jungle, and when encouraged, they become valuable cultivators. Another class of people called Tharoo is also found in the Rohilkund Terai; they are said by some to have originally been the same as the Boksas, but to have separated on some point of food or caste: none of these now reside in Chandee.

101. The other tribe, the Herees, are Mahommedans, and are said to have come originally from near Attock on the Indus: they settled in the Oude and Rohilkund Terai, where they still exist in considerable numbers. Some seventy years ago a colony of them came up to the Kaneea hills, in Chandee, where they took up their residence. They cultivated a little and possessed a good many cattle, but no small portion of their livelihood was obtained by levying black mail on caravans, travellers, and from the surrounding country, for which purpose Kaneea is well situated on a commanding height, overlooking the plain, while at its back is a mass of low hills, in which are abundance

of retreats for the thieves and booty, safe from the pursuit of any thing less than four or five thousand men, supplied with provisions, who should fairly occupy the hills for several days and ransack every defile.

102. The two tribes were occasionally "hounded," one against the other, for the recovery of plunder, and had periodical quarrels and skirmishes together on their own account. The most serious remembered was about a tank, three miles from Kaneea, which was common to both, in which the usual compliments were exchanged, i. e. the throwing in a dead cow by the Herees, while the Boksas tossed in a dead hog. But in truth the quarrels and fighting were much more nominal than real, each party being sensible that any serious dispute must end in the ruin of both. Extraordinary stories are told of Herees swimming across the Ganges on large skin floats, (made of a whole buffalo hide, called *surnāe*) seizing handsome women or those who wore valuable ornaments, who were bathing at the sacred spot, and carrying them off on the floats to the other side of the river. Possibly such an occurrence may have happened once or twice, when those bathing were taken by surprise, but it never could have been a common practice.

103. About the year 1796 A. D., the tribe of Herees amounted to about eight hundred souls. There are now but two individuals, a man and a woman of the tribe, left in the Chandee province, neither of whom are indigenous Herees. The man was originally a Doon from the hills, who voluntarily joined them and turned Moosulman: the woman was of the Kuhar caste of Hindoo, was carried off by them in 1796 when they plundered Chandee. She became the wife of the chief, but now lives in great poverty in a Boksa village in Chandee. She still, however, calls herself a princess, and talks of the hundreds of warriors who were formerly under her command. No emigration *en masse* took place of this tribe, or even of sufficient numbers at any one time, to excite remark. Some individuals have left this province and joined other haunts of the tribe in Rohilkund, but the mass seems to have gradually, to use the native expression, melted away.

104. It is strange that although situated in the same locality, with habits and mode of livelihood the same, the arms and mode of fighting of the two tribes should have been so different. The Herees relied chiefly upon the spear, to which some added a sword, and a very few kept a gun or a bow. The Boksas, on the contrary, adhered to the matchlock, every man being furnished with one of those weapons. They are excellent shots and keen sportsmen; almost every boy of ten years old will hit his mark at a very tolerable distance. Three or four years ago, when gangs of banditti, composed chiefly of Goojurs, infested the northern part of Moradabad and Saharunpoor; they constantly retreated from pursuit into the jungles, where they would plunder any thing they found worth taking; yet when at the strongest, they scarcely dared molest a Boksa. Their own expression was "we should raise a nest of wasps about us, which would effectually close the jungles to us as a place of retreat in future." These Boksas, if encouraged, make good subjects, excellent cultivators, and would prove valuable police men in the jungly parts of the country. They still exist to the number of five hundred souls in the lower half of Chandee.

CASTES.

105. Both upper and lower classes seem to be as strict in preserving the rules of caste as they are in the plains, but not more so. From not having seen much of the English, they have no ridiculous affectation that doing such and such things, is against

their caste, but will generally do what they are told, as is usually the case where the English are little known. Of the Bramins, the Gour caste claim to be highest, and will not eat from the hands of any other; but on the other hand, some of the other divisions consider themselves just as good as the Gour, and will not eat food prepared by this tribe. The Surolee Bramin in Gurhwall is, by the general population, considered the highest, and scarcely any would refuse to eat from their hands; but few of these are to be found in the Doon. The particular test as to whether one tribe allows another to be as pure as itself, is whether the members will eat boiled rice prepared by the others; for there is among every tribe a latitude in eating bread and other food prepared by the men, whose touch would be considered to pollute boiled rice. There are peculiarities in some other points; the highest caste man would not object to allow the very lowest to singe the hair off a goat which was to be prepared for his own dinner. It is worth noting that all over the hilly part of Gurhwall, and partially in the Doon, there are two grand divisions of each tribe, high and low (or as the Chinese would say first and second chop): the latter are called Kussea, as Kussea Bramin, Kusseca Rajpoot, &c. They are the majority; by neglecting regular bathing and other ceremonies which their every day business would hardly give them time to attend to, they are considered to have sunk a step, and those who have maintained these little niceties, would not eat food prepared by the Kusseas of the tribe.

106. With a view to ascertain the variety of castes and proportion of each, the records of the Court at Dehra for four years, viz., 1823 to 1826 were examined, and the following is the result.

Caste.		Caste.	
Rajpoot,.....	381	Nace,.....	15
Nanik Shahee, Fukeer,.....	51	Bhat,.....	8
Gosyn,.....	71	Bulwar, or Bunjarra,.....	16
Jogee,.....	16	Khuteek,.....	8
Bodce, Carpenters,.....	11	Mollee,.....	18
Lohar, Blacksmiths,.....	22	Goojue,.....	27
Bramin,.....	69	Gualla,.....	4
Durjee, Taylor,.....	48	Mehra,.....	8
Bhungee,.....	34	Jat,.....	10
Dhoomura,.....	14	Chumar,.....	47
Muhajun and Buneas,.....	56	Sonar,.....	24
Kullal,.....	57	Moossulman,.....	157
Koomar,.....	21		
Kuhar,.....	10		
		Total	1,203

These include all whose evidence or depositions were taken at length, in which case the man's caste is always noted, whether he appeared as plaintiff, defendant, or witness. Many of the above have various internal ramifications. A few, but not many, of the above may have been inhabitants of the plains, and a very few of the hills. It is not improbable that there may exist in the Doon some other castes not enumerated in this list, but they would be few in numbers.

RELIGION.

107. The Hindoo religion is the prevalent; and Sheeva not only has the greatest number of votaries, but they are daily encreasing, to the prejudice of Visnoo; because

the votaries of the latter are not allowed openly at least to eat animal food, or drink liquor.

RELIGIOUS ESTABLISHMENTS.

108. The temples at Rekikes and Tapooban are dedicated to Visnoo ; their officiating priests are of the Rāmānoojee Byragee sect ; Visnoo has also three other temples. Sheeva has the following dedicated to him : one at Chundermonee, one at Bahmunwalee, at which a Bramin officiates, but a Gosyn built and owns the temple, one at Beerpoor, whose officiating priest is a Gosyn. The above temples, both to Visnoo and Sheeva, have each some small endowment of land ; but Sheeva has numerous other temples without any endowments, at which worship is performed occasionally. There are numerous other little petty temples to different deities, which are not worth particularizing.

109. The Sikh temple should be described, as being the only rich religious establishment in the Doon ; the appearance of the building has above been mentioned, to which is added the following information. It has two tanks, both of masonry throughout, supplied by a small canal, from under the hills ; one is small, but the other is very fine ; one being 230 feet long and 184 feet broad ; it has also a small reservoir, which is filled by the rain water, and is used for boiling the different pulses under the name of *dal*, which cannot be softened by boiling even for hours in the canal water.

110. Its revenue consists in an endowment of seven villages, which give about 1,600 rupees a year, from the British Government ; one of six villages, yielding about 35 rupees a year from the Terie Rajah, and the presents and offerings may average about three or four thousand rupees a year.

111. The head of the establishment is called muhunt ; on his death his successor is elected by a punchayet or assembly of the Sikh chiefs, from among his chelas, (disciples) who are taken from various castes. The late muhunt is said to have been an intelligent man, and to have kept very strict discipline in preventing luxuries among his chelas ; but the present one is a very inferior simple sort of person, and till the other day could not read. There is no objection to a woman's managing the concerns of the temple. Punjab Kooar, the wife of Gooro Ram Roy, himself dying a few months after he settled here, superintended the establishment for about 25 years ; and there has been a second instance. The present muhunt, however, affects celibacy. At the installation of a new muhunt, a large collection of people are fed : a nuzzur of 500 rupees is presented to the Government, who in return bestow a pair of shawls of about half of that value. The muhunt and his chelas wear a distinguishing cap : it is of red broad cloth, sugar-loaf shaped, black silk fringe round the bottom, and worked all over with different colored thread ; it is not handsome. Any pilgrim will be supplied with a day's food at the temple.

112. The offerings come chiefly from those Sikh surdars, who reside on this side of the Sutlej ; but occasionally from those on the other side. In the Hooly of 1827, Runjeet Sing sent an offering of 500 rupees. The Akalees and some other sects of Sikh do not respect this temple at all : most classes of Hindoos pay as much respect to it as if it were a Hindoo temple. There is a curious cave in the dace or division of Oodewala, about three miles from Dehra to the west of Bijipoor, called Toopkesur. It has some stalagmite on the floor, and a few stalactiles hanging from the roof ; but on

inspecting the locality of the cave and of the superincumbent soil, it is difficult to conceive whence sufficient water could have come to have formed these stalactites. There is still one spot where water is said occasionally to drop; probably in rainy weather, for it certainly does not in dry. The cave is inhabited by a Suniassee, who occasionally visits other places. He is extremely venerated by the people, and is a fanatic rather than an imposter; he will not accept money but merely food, and occasionally clothes: and should more food be brought to him than he requires for that day's consumption, he gives the surplus to the first passer by who will accept of it, trusting to providence for the next day's supply. He spends most of his time in a dreamy sort of existence, which he considers a contemplation of the excellencies of the deity. There are also on the Doon side of Hurdwar two small caves, inhabited during the fair by Gossains, who receive a few offerings from the people who come to bathe in the tank called Beemgora, immediately below the caves.

113. The Moossulmans do not seem to be disliked by the Hindoos; indeed, it would be great presumption in them to show any such spirit, considering that the best Government they ever had was a Moossulman, which lasted 17 or 18 years, during which time colonies of Moossulmen settled here: nor, indeed, would it be tolerated were they inclined to do so. There is, however, no public worship,—there being no mosque or even the remains of one, which is certainly an extraordinary circumstance. It could not have been from respect to the Hindoos that the Moossulmans refrained from building one; for they have a burial ground in the town of Dehra close to the temple, which does not appear to give any offence. The procession in the Mohurram has for the last year or two been carried about, being set on foot by a Moonshee from the plains, but so far from giving any offence, the Hindoos all take a holiday to see the show, particularly the men of the Sirmoor Battalion, who form part of the procession, firing their matchlocks, &c. Certainly nothing can tend to prevent quarrels at these seasons so well as the circumstance of the different sects joining in each others religious processions; it would be beneficial could the custom be introduced all over the country; but in these matters the people must be led not driven. The few Moossulmans who still remain in the Doon are, with scarce an exception, of the poorest class, and so illeterate and ignorant as hardly to know whether they were Soonnees or Sheeahs, consequently they readily attended the tazica when established by the Moonshee, for the double pleasure of seeing the show and partaking of the shurbut, which was liberally distributed.

MARRIAGES.

114. The mode in which marriages are conducted is the common Hindoo mode. The girl's father gives her a dower, if he can afford it, of 500 Rs., of which perhaps 100 Rs. would be given in cash, the rest in clothes, furniture, ornaments, &c. The poor, of course, give less, but no marriage takes place where the girl's dower is less than 10 Rs. The hill custom of paying the girl's father so much for her, in fact buying her, is totally unknown here. Any Hindoo receiving a sum for his daughter would be considered as greatly degraded. The custom of one wife having several husbands, who are brothers, is utterly unknown, and only spoken of with disgust among the people of the valley, although it is common enough in the hills immediately above it.

FUNERALS.

115. The funerals are also like those in the plains. Those who can afford it carry

the body of their relation to the Ganges at Hurdwar, or Rekikes. Others who are poorer, to Chundermunnee, and the poor burn them on the spot. The residents near the Jumna consider that as of equal sanctity with the Gunga. The bodies of those who die of the small pox are buried; the idea is that if burnt, the smoke would cause dreadful diseases as far as it spread. The Gosyns and Bhungees always bury their dead; but the Bhungees are obliged by the other inhabitants to bury their dead in a perpendicular position, with the feet upwards, for fear the ghost should walk.

SUTTEES.

116. Suttees must from the number of monuments have formerly been very frequent. It is hardly possible to take a ride in any direction without seeing one or more of them: in some places, near Rajpoor for instance, more than fifty together. A circle described round the Government office as its centre, with a radius of a mile, would probably enclose a hundred. For many years they have declined. There have not been above five since the British Government was established, the last of which was seven years ago.

CHILD MURDER.

117. The murder of new born female infants was also formerly frequent, but it has declined, and the people now deny that it exists, which at least shows an advance in the scale of morality and civilization. It was chiefly confined to the Rajpoots, and notwithstanding the denial, there is reason to believe that it is still practised.

SLAVERY.

118. Slavery exists but in a small extent at present. Under the native Governments little attention seems to have been paid to either Mahomedan or Hindoo law regarding slaves: the master's power was virtually almost despotic over the slave: their employment was very similar to that of domestic servants. A man and his whole family could be sold for debt, or for arrears of revenue, a practise which was carried to an intolerable pitch by the Goorkas. Since the establishment of the British Government, slavery here as elsewhere, is dying a natural death.

EDUCATION.

119. There are two schools in the town of Dehra: one kept by a Moossulman who teaches Persian—he has eight or ten scholars; the other by a Bramin, who is called Pada—his scholars are more numerous; he teaches Hindoe. The pay is from two to eight annas monthly, according to the ability of the parents, who also make small presents to the school-master at festivals. The better sort of people educate their children at home; a little reading, writing, and arithmetic only is taught. Major Young has, at his own expense, for some years established a school in his lines, at which both Hindoe and Persian is taught. Although it is open to all children, yet hitherto none but those of the sepahces have attended it. After learning to read Hindoe, a few have studied Persian. The prejudices and ideas of some of the natives are amusing. Major Young one day asked one of the cleverest of the boys who had learned Hindoe very quickly whether he would not begin Persian, “Do you think I would learn a Moossulman's language,” answered the boy.

LANGUAGE.

120. The language of the Doon is Hindoostanee, with a few hill words and terminations mixed, and a few peculiar to itself. The character is the Dewa Nagree, the same that is used in Gurhwall, different from that known in Sirmoor, although the two provinces adjoin. The merchants and some of the shop-keepers, as in the plains, have their own peculiar character.

TIME.

121. The divisions of time are the Hindoo. The era is the Sumbat, and sometimes, in writing, the Sake.

DRESS.

122. The costume is much the same as in the plains, consisting of the *pugree*, *ungerka*, and *dhotee*, or sometimes trousers of cotton cloth. In the winter those who can afford it wear chintz dresses, quilted with cotton, which are imported ready made from the plains. The poor merely throw their tattered blankets over their heads and shoulders. That of the women is an *ungeedá*, a tight covering for the breasts; *lenga*, a large, full petticoat tied over the hips; and *doputta*, or sheet thrown over the head. Some add the *koortee*, a jacket, which joining the petticoat, completes a decent covering to the body. A few of them, when they work in the fields, twist their *doputta* on their heads in the form of a turban like the Gurhwall women. Those who are better off in the world, wear the *peswaj*, a sort of jacket made to fit tight to the body, to which is attached a very full petticoat: the latter will sometimes measure twenty yards round the skirt, and is generally made of some pretty strong material, while the upper part is so flimsy, as to be renewed two or three times before the petticoat is worn out.

FOOD. .

123. The inhabitants, generally speaking, who can afford it, eat meat and drink liquor; even many of the Bramins do openly, and many more secretly. They give themselves a much greater latitude in the different birds and animals which they eat than the people of the plains, but do not carry it so far as those of the hills. A few do not object to animals that have died naturally. The food most commonly eaten is rice with a vegetable curry; and bread made partially of wheat flour, but chiefly of *mundooa* and other grains.

LIQUOR AND DRUGS. *

124. The liquor made in the Doon is almost entirely distilled from sugar, and is very inferior: no scruple is entertained against buying it from the shop, even by those who drink secretly; they only take the precaution of procuring it in the same way. There is, however, the same sort of prejudice against what is sold at the licensed shop, that exists in Ireland against Parliament whiskey, it being accounted inferior; accordingly, a little is smuggled occasionally from Kalgoo in Jounsar. * Much *bháng* and *churus* is taken, chiefly in smoking, and some opium; but scarcely any one will allow that he is addicted to it.

DISEASES.

125. The chief diseases are fevers, dysenteries, rheumatism, and the guinea worm. The two former are chiefly at the end of May and beginning of June. Fevers again appear about the end of the rains. The most annoying sort is a quartan fever, which even the English surgeons find very difficult to cure. The rheumatism shows itself during the rains, and in the raw wet weather of the cold months. The goitre is scarcely seen among the inhabitants of the valley, although not uncommon in some parts of the hills above. The common notion of its being caused by drinking snow water seems to have little foundation, for it is very general in some parts of the world where snow was never known; the Boglipoor hills for instance. There is a disease of the eyes common in Gurhwall, and partially known in the Doon, called bugulgund. The eye-lids grow red and slightly swell; sometimes the eye-lashes fall out, the eyes grow dim and sight becomes much impaired, sometimes altogether lost. This continues from one to six or seven years, when not unfrequently the eyes begin to amend, the disease goes off, and sight returns, but never so strong as it was previous to the attack.

126. The guinea worm, *narooa*, is very common: sometimes a man has two or three come out at once in different parts of the body; should they be drawn out carefully by degrees, so as not to break them, they give very little annoyance. Instances are known of children having them, and yet running and playing about during the days in which the worm was gradually extracted, as if nothing were the matter. Should they be broken the place swells, suppurates, and requires a long time to get well, but the disease is not a tenth part as bad as is described in medical books as happening to Europeans. They chiefly attack the poor in the extremities, but contrary instances are known. The late muhunt of the Sikh temple had one come out near his eye. The present muhunt has had it more than once, and some other instances have happened occasionally of people above the poorer sort being afflicted with it. The worm is usually not more than from two to six feet long. Many very small worms, which appear like young ones of this species, may be found in mud composed of putrid vegetation at the bottom of streams.

127. The natives of the plains, unless they go into the jungly parts in the unhealthy season, i. e. from beginning of June to middle of November, do not seem more liable to disease than the inhabitants of the Doon, with the exception of a slight disorder in the bowels, shortly after their arrival. The men of the Sirmoor Battalion seem to be more disposed to disease than any other race. This probably arises from their being enabled to live in a grosser way than the common inhabitants; at least, no other cause is very evident. It cannot be entirely, because being hill men, the Doon climate does not agree with them; for in that case the police, who are composed of the same race of men, indeed, almost every police burkundaz and chaprassee is a relation to some man in the corps, would suffer equally; but this is not the case, for in the years 1823, 24, and 25, numerous parties of both were out together during the unhealthy season, in consequence of the highway robberies then going on, and invariably the men of the corps were taken ill in a much greater proportion than the police people. A very strong instance lately occurred. On the 11th November, 1827, nearly a hundred men of the Kumaon provincial battalion, of which the head quarters is at Almorah, were sent to the Doon, and stationed in small parties in various parts of the jungles of the valley and of the province of Chandee, in order to check the gangs of banditti who occasionally come up from the plains. All remained till May, and some till June 1828, and in all that time only three men were ill enough to go to hospital. There is no doubt that had an equal number of the men of the

Sirmoor Battalion been similarly detached for as long a time, at least one-fourth would first and last have been sent to hospital, and that several would have died.

128. Many instances are known of men (chiefly of the corps) in the month of June, being seized with a fever one day and dying the next. Doctor Leslie found many of the men of the Battalion afflicted with as bad liver complaints as any he had ever observed among Europeans. One peculiarity of the Doon climate is worthy of note, viz., that if a man of the plains ever had, even twenty years before, a venereal disease which was cured in their way by a native Hakcem by means of corrosive sublimate instead of being properly treated by an English Surgeon,—residence of a year or two in Doon will almost infallibly bring on the disease again, although in a different shape, generally in affections of the bones, accompanied by inveterate rheumatism.

129. The villages of the Doon are generally choked with dry hedges covered with nettles, and other bushes and creepers, forming little enclosures full of vegetables; the houses, too, are very often covered with plants of the pumpkin kind. The only paths through them are narrow lanes, a foot deep in mud after rain, all which doubtless contribute to disease.

130. Generally speaking, the inhabitants are certainly not so healthy as they are in the plains, but in this respect they have lately improved, and will continue annually to do so as the district becomes more cleared and cultivated. In Dehra, and the villages in the neighbourhood and along the borders of the pool or artificial canal, the health of the people has decidedly improved within the last two years, in consequence of the bed of the canal being properly cleaned out. The health of the police at the out-posts has also been promoted by making wells to supply them with drinking water; and many a traveller has, instead of taking the trouble to ask the reason, laughed at what he deemed the absurdity of sinking a well within a few feet of the edge of a beautifully clear stream running over a bed of gravel. But this bed of gravel is only found in certain spots; much of the bed of the stream is a mass of rotten mud, composed of putrid vegetation; and although the water looks clear and has nothing disagreeable to the taste, it is impregnated with the effluvia of putrid vegetation and contains the seeds of disease. The natives always assert that the water is as much the cause of illness as the air; and although the English usually ridicule the notion, experience tends to prove that the native idea is correct. Wells of a few feet deep have been dug at two or three police stations within a yard or two of a clear stream, and the health of the men stationed at these posts has decidedly improved; which can only be attributed to the water being in a great measure freed from its impurities by percolating through the gravel and sand. A strong instance occurred of what may be done in this way at the village of Dhumpoo. There was a tank of dirty greenish water, which was the sole supply of the majority of the inhabitants. The officer in charge of the district, Mr. Shore, induced the people to try the experiment he recommended. A well of about ten feet diameter was sunk near the edge of the tank; a circular wooden frame of about four feet diameter, was erected in the centre, and the surrounding space filled with sand and gravel from the bed of a neighbouring stream. The water from the tank, by filtering through this, was drawn out perfectly pure.

131. The season for residing in the jungle is worth noting. Those who are accustomed to the sort of climate, first go there about the 15th of November, but by the first of December all danger is over: any one from any part of India might with perfect impunity encamp in the worst part of the forest from that time till the beginning or middle of May. At this season, a few days rain, called the *chota bursat* (or small rains) sometimes

occurs, after which the jungle effluvia is peculiarly unhealthy, even deadly almost like the blast of the Simoom : men sometimes die in a few hours after being seized with fever. This is attributed to the rapid rotting of the dead leaves caused by the heat after they have been well wetted. Should the *chota burst* not occur, there would, generally speaking, be little danger in remaining in the forest until the middle of June ; provided the only water used for drinking be that from wells or from a considerable sized stream, too rapid to allow the leaves to lodge in its bed, and not from the small rivulets, the beds of which are in many places one mass of rotten mud. When the rains have fairly set in, the danger is not so great, although severe fever would generally be the consequence of a night or two passed within the unhealthy limits, which in some would cause death. About August the unhealthiness encreases, and about the end of September is the most deadly season ; in October it gradually diminishes, and by the middle of November, those most accustomed to the climate, make their appearance to procure timber and other jungle produce. The disease is what is denominated the jungle or marsh maisma fever ; the natives call it *ol* or *oul* ; it is probably caused by the putrid vegetation, but does not at all depend on marshy ground : in some of the most deadly places the ground is either rugged and broken, or in a slight declivity which prevents the lodging of water, and it is consequently quite dry and firm at any season of the year. The localities of the fever are very inexplicable ; some places, which from their appearance one would suppose most deadly, are almost innoxious : any person might pass a few nights there at any season without danger ; and the police who reside the whole of the unhealthy season, only suffer slight attacks of fever towards the end of the rains. The jungle on the direct road between Dehra and Suharunpoor is of this nature. Hurdwar itself is not unhealthy, probably from the strong current of air which sweeps through the break on the hills over the bed of the Ganges, on the banks of which the town is situated ; for only a few miles from Hurdwar are some of the most deadly spots.

MEDICINES.

132. The medicines are simple. In fevers, the prescription is to starve for three or four days ; then take a mixture of spices and purging medicines. In dysenteries much the same. For rheumatisms chiefly external applications ; when very inveterate, firing with a hot iron is resorted to, and for the guinea worm, not any thing is applied. Charms are not much used, except in diseases which are believed to have been produced by witchcraft. When very ill, a kill or cure remedy, of a dose of orpiment or yellow arsenic is given. ^m

SUPERSTITION.

133. There are many sorts of ghosts, fairies, &c. The chief are as follows : Peechasun, or Choorel, according as it is male or female ; it is like a human being, but with its feet turned backwards. Those who see it die shortly after. The Dhag, is the name given to an old woman, who by study and incantations has acquired the power of killing people by causing their livers to decay. In the former Government many poor old women were put to death under this accusation. One or two complaints have been made to the civil officer now in charge, but he found an electrifying machine a grand specific. A rupee being placed on the leyden jar, the suspected witch was desirous to take it off with one hand, holding the chain in the other ; her failure proved her to have no power, and a few shocks were given to the complainants as a specific against it ; at least until the witch should be powerful enough to take off the rupee. Sore eyes are attributed to an evil eye called Chobuttea. Fairies sometimes cause the sickness, or even death of women, and

sometimes men, without cause : occasionally because they have built houses on the spot on which the fairies formerly danced.

134. A few other notions may be mentioned. After suttee has taken place, it is necessary to watch the place for eight or nine nights subsequent ; otherwise a spirit called Jin, will come and resuscitate the ashes, and enjoy the woman : at day break she again becomes ashes. Many of the women have a notion that a piece of paper covered with Persian writing of any sort, is good for the headache. Even the most enlightened of the people will not believe that silver mines exist ; all silver they maintain to be made by alchemy. Others have been introduced under various heads of the reports ; and there are many which are not worth noting, being common to many other parts of India.

PARTICULAR FESTIVALS.

135. The fairies last mentioned are the only sort of ghost, to appease whom any ceremonies are undertaken. A number of women collect together, every now and then, prepare a mixture of all sorts of food, and then eat them with some ceremonies. No man is allowed to be present. This is chiefly in those families in which any member has ever suffered from these fairies.

HISTORICAL NOTICES.

136. The following is a short account of the Doon for some years previous to the establishment of the British authority. It will be going enough back to commence the invasion of Najeeboudoulee. This prince conquered the Doon about 1757 A. D., and retained his authority for about 17 or 18 years : the people speak with admiration of his Government ; he is said to have protected the residents of the district, to have given encouragement to all sorts of people from the plains ; to have dug several canals and two or three wells, and altogether encreased the revenue, at the same time that the inhabitants were lightly assessed, to nearly a lac of rupees. With the abolition of his authority the prosperity of the Doon seems to have vanished ; the Sreenugur Rajah, who regained possession after him, from inattention, or as some say from oppressing the Moossulmans, caused the province to be greatly deserted. His authority existed about ten or twelve years, till it was conquered by Golam Kudur. It should be mentioned that about the year 1783, a large party of Sikhs came into the Doon : they did not attempt to settle but confined themselves to plunder, and this they pursued most strenuously, not even sparing the houses round the temple of Gooroo Ram Roy ; although they did not go so far as to rob the Temple itself, in which, according to custom, the valuables of the country were placed for security. They burnt many villages, and killed numbers of the inhabitants in skirmishes, as the existing Government was not strong enough to make any regular opposition.

137. Two or three years after this, about 1786, Golam Kadur invaded the Doon, burnt and plundered many villages, and did not even spare the temple, both to obtain the wealth that was there deposited, and to show his contempt of the Hindoos. He left as his deputy a person by name Omed Sing, a native of the hills, who remained faithful to him, for two or three years, and then, deserting his allegiance, again transferred the Doon to the Sreenugur Rajah, whom he also deserted about three years after, and entered the service of the Sirmoor Rajah. At this time the Rajah of Sreenugur invited the

Mahrattas to assist him in recovering the province from the Sirmoor Rajah, and during their stay here, the former of course was acknowledged: there was therefore no fighting, but after a few desultory skirmishes and plunder, the Mahrattas retired and Omed Sing found means to preserve the Doon under the authority of the Sirmoor Rajah for about 8 or 9 years. He then received an offer to marry his daughter, from the Rajah of Sreenugur, with which he complied, and again transferred his service and the Doon to the authority of the latter. About the year 1800 or 1801, an officer of Baboo Scindea's, with a party of Mahrattas, invaded the district, took the rents and what other plunder came to hand, and retired: some people were killed by skirmishes; but from the weakness of the government no regular opposition was offered them.

138. Just after this, Omed Sing was taking steps to throw off the authority of the Rajah of Sreenugur, and to make himself independent, when the Goorkas saved him the trouble by conquering the country for themselves. The above account is from the traditions of the inhabitants, and contains only the regular invasion to which the Doon was subject: petty incursions without number occurred at different periods: sometimes by the Sikhs and sometimes by the people of the plains: the former generally came with from fifty to two hundred horse, the latter with horse or foot as occasion offered. Cattle, which from the quantity of pasture, thrive well in the Doon, and of which there used to be great numbers in proportion to the population, compared with other parts of India, seem to have been their chief object; though they of course had no objection to any other plunder that fell in their way; and although they did not kill people unless they were resisted, yet it necessarily happened from such a state of things, that many lost their lives, and villages were occasionally burnt. The Doon, indeed, seems to have been subject to these petty incursions for a very long period, so much so that the existing Government not being able to put a stop to them, the zemindars of the Rarpoor, Rreee, and Juberera (towns in the plains) received each a small jagheer as a bribe to prevent those, subject to their authority in the plains, from plundering the Doon.

139. As scarcely a single person could be discovered, who had any written notices on the subject, there may perhaps be mistakes in dates, but in the main points the account will probably be found correct, which is sufficient to give an idea of the anarchy and confusion existing in the Doon for many years previous to the establishment of the British authority. In fact the province, although nominally forming a part of the Sreenugur Rajah's territories, belonged to any power who chose to send a force to conquer; and although the existing Government was rarely strong enough to make any regular opposition, yet numerous skirmishes took place, in which many of the zemindars were killed; many others emigrated to avoid the plunder and oppression to which they were subject; the lands of others were confiscated at the will of the local Governor to bestow on his favorites and dependants, who in their turn were forced to make way for the friends of the new Aumil; so that on the whole very few villages indeed are in the hands of the original occupants or their descendants. Records are almost unknown here, the few that ever existed having been destroyed or lost during the period of the confusion above described.

140. It seemed to be thought by some that the acquisition of the Doon on the part of the Rajah of Sreenugur, is to be dated from the time of Aurungzebe, but there can be no doubt that the province has in reality always formed part of the hill principality of Sreenugur or Gurhwall, as far as the remotest tradition can be traced. The comparatively easy access from the plains, compared with attempt to penetrate into any

other part of the hills, and the richness of the valley in those days, always seemed to tempt any local Governor of the adjoining plains, to attempt its conquest, or at least plunder; and to prevent this it was an object with the Rajah to procure a sunnud from Delhi. He gained his wish about the year 1658, A. D., and received a sunnud from Aurungzebe for the Doon and Chandee, in return for his delivering up Suliman, the son of Dara Sheko, who had taken refuge in his territory. There is at this day a fine grove of splendid *jamin* trees in the upper part of Chandee, near the foot of the hills on the left bank of the Ganges, which tradition asserts to have been planted by Suliman when residing in that part of the country.

FORMER GOVERNMENT.

141. The confusion above described renders it difficult to say any thing about the former government. Plunder and oppression, both regular and irregular, seem to have been the order of the day, or rather of the country. As to the land, the Government claimed to be the proprietor. The revenue consisted of that on land; duties on the transit of merchandize; a tax called *mulba* levied on small gardens, and on artisans, on water mills and some other articles; and one called *punch khut*, consisting of five divisions, viz. *muro*, taking the property of people dying without heirs; *ruhta*, the property of those (provided any could be found) who deserted the province; *bukta*, unclaimed property not included in any other head; *punch khut*, fines for crimes against caste; and *rullian dhun*, treasure which might be discovered. But excepting the two first the produce of all the others must have been precarious and trifling in amount.

142. No very regular system in assessing the revenue seems to have ever been in force, since the time of Nujeeboodoulee till the establishment of the British authority; every local governor seeming to do as he pleased, and to study how much he could get for himself, without caring how the people or the district suffered. In the time of Nujeeboodoulee, only the land revenue is said to have reached to a lak per annum, since which it gradually declined; and the Goorkas in the latter years of their stay, did not realize above 16,000 or 18,000 rupees a year in every way. The system of oppression they pursued was much the same as that described by Mr. Traill in his report on Kumaon.

143. The Goorka Government had, notwithstanding, what has been the oppressions which the people suffered, made some advances in civilization which have not been found in any other native government with which the English have come into contact since our nation first rose into power in India. Their administration is strict and even severe regarding the officers of government, on whom the most barbarous and cruel punishments are sometimes inflicted, extending not merely to the individual but to his family: but it is a vigorous government, and not an oppressive one to the people. The provinces about the capital, and indeed for a considerable distance from it, are generally said to be in a flourishing condition, and the people well off. The distant and conquered districts suffered from the system which was perhaps necessarily pursued. They were parcelled out among the military chiefs who were entrusted with the administration of justice and collection of the revenue, out of which they were to pay the troops and establishments, and remit the surplus to the government treasury. The kingdom of Gurhwall, of which the Doon forms a part, suffered more than Kumaon on the south-west; or the provinces of Jounsar and Bawur on the north-west: these submitted to the Goorkas with little or no resistance, and were treated with comparative leniency; but the inhabitants of Gurhwall were a much more spirited race and opposed the Goorkas with success for several years. Ultimately they suffered, accordingly,

being treated with great severity in order to crush their spirit; they were also disarmed, with the view of preventing the possibility of their rising again. The last action which completed the conquest of Gurhwall, was fought in the Hindoo year 1860 (A. D. 1803-4) close to Dehra, in which Purdoomun Sah, the Raja, was killed, one of his brothers, Petum Sah, was taken prisoner, carried to Katmandoo and kept there eleven years; he was released after the Goorka war at the intercession of the British Government. The third brother escaped but died not long after. The son Soodursun Sah escaped and took refuge in the British provinces. He resided at Juwalapoor near Hurdwar in very poor circumstances, until he was restored to a portion of his dominions by the British Government, after the conquest of the north-western hills in 1814, A. D.

144. The oppressions and exactions of the military chiefs in the distant provinces were so great, that the revenue was falling off and the country becoming depopulated: hundreds of children had been carried away by the soldiery to Nipal. This produced a vigorous measure on the part of the Nipal Government, and one, it may be observed, worthy of an enlightened nation. Several hundreds of these children, as many indeed as could be discovered, were collected, sent back at the Government expense, and restored to their parents; although many of them had been fairly sold by the parents; the Government alleging, that they were well aware that these sales had been forced by the distress caused by the oppressions and exactions of their own officers and soldiers. A commission was also appointed to make a tour of the provinces, examine the state of affairs, and reduce the assessment to a fair demand; this was so admirably carried into effect, that the British civil officers have not to this day been able to discover errors in the estimate of the Goorka commissioners. Some arrangements also were in progress to establish a proper administration of affairs and prevent a recurrence of the abuses described. A road was in progress from Katmandoo to the Sutledge and a regular post of runners at the regular stages was established along the whole distance. But there had not been sufficient time for these beneficial arrangements to produce much effect before the war broke out with the British Government; and from the sense of the injuries which they had suffered, the people of the country were so exasperated against their Goorka masters, that they almost *en masse* gave every assistance to the British troops. Had the population been what it was at the time of the Goorka invasion, and had they been in favor of their own Government, we should have found it a much more difficult matter to penetrate into the mountains.

PRESENT GOVERNMENT.

145. On the accession of the British Government, the Doon was annexed to Suharunpoor, and declared subject to the general regulations. This step is much to be lamented, and the consequence of it will yet be felt for some years. It appears, however, to have been unavoidable, for Government not having an officer to spare for the concerns of the valley, it became necessary to annex it to some other district, for which purpose Suharunpoor was the only one to which it could have been joined. As the civil officers in charge of Suharunpoor had more than they could attend to properly already, the Doon was pretty nearly left to shift for itself; and the people were plundered by the native officers in every possible way, and by the servants of the English gentlemen who came up on shooting parties: it will hardly be credited that several villages were deserted from the latter cause alone. It was useless saying to them, if you are oppressed the Court at Suharunpoor is open to you; the majority would as soon have thought of going to Calcutta; for to this day they look on a journey to Suharunpoor, in much the same light that a Scotch or North of Englandman looked on a journey to London a century and half ago.

146. Government being, however, aware of this, appointed, as soon as they could, an officer, Mr. Shore, to the charge of the Doon. He arrived in the commencement of 1823, and seeing that the regularity and formality of the existing system was by no means calculated for the state of society then existing in the Doon, he in a great measure departed from it, administering affairs in a more simple manner. This was duly reported to Government, together with a short account of the Doon, and a suggestion of the propriety of a different mode of administration to that which had been ordered. With this Government were after further enquiries and references to Mr. Traill, the commissioner in Kemaon, pleased to comply; and in the beginning of 1826, the Dehra Doon was declared to form part of Kemaon, that and the Sreenuggur tehseldarce being under the separate management of an assistant to the Commissioner. Of course the system in force in Kemaon was made current in the Doon; which it is needless to describe here, it having been done so fully by Mr. Traill in his reports to Government.

REVENUE.

147. On the first acquisition of the Doon by the British Government, for two years the revenue was held *kucha*, and the officer who had charge fixed as the demand one-third of the produce and two per cent. on the whole, which produced 12,987 rupees in 1222, (1814-15). This appeared to one accustomed to settlements in the plains, to be very light, but it was unfortunately fixed without reference to new or old villages. The same amount might have been easily realized, had it been more equally divided; for there can be little doubt that the above sum on the whole must have been less than one-third of the produce.

148. The reason is this, that two years before the Doon was conquered by the English, Hustidul Choutra, a Goorkha officer, finding that a country without inhabitants would be of little use, exerted himself to stop the oppressions of the Goorkha soldiery, and to repopulate the province; to do which he had leased many villages at a nominal rent of 5 rupees per annum. The engagers had, by fixing their share from the cultivators at a sixteenth and eighteenth of the produce, induced many to settle; some of these were old Doon people who had emigrated on the Goorkha conquest; some were new people from both sides the Jumna, in the plains, who were tempted by the almost rent free terms to come into the Doon. When, however, one-third was demanded from the holders of these villages, although by a little arrangement with the subordinate revenue officers, it is probable that less than that was actually paid, still they were obliged to raise the rent on the cultivators. The consequence was, that about twenty villages were completely deserted, whose revenue would, had they been properly taken care of, by the present time have amounted to at least 1,000 or 1,200 rupees. The second year's revenue amounted only to 9,613 rupees.

149. Unfortunately in the third year, in 1224 Fussily, (1816-17) when a settlement for four years was made, the officer who was employed could, from the quantity of business he had in the Suharunpoor district, where he was also Collector, pay very little attention to the Doon, and the best mode he thought of was to take the average of the two former years as a basis; and taking it for granted the district must have improved to encrease the demand a little on most of the villages. This produced for 1224 F. S. (1816-17) 11,146 rupees, for 1225 F. S. (1817-18) 12,020 rupees, 1226 and 1227 F. S. (1818 to 20) each 12,050 rupees. As above mentioned, the average of these sums or even a higher amount, might have been realized, had a little discrimination been exercised in assessing the different villages. This Mr. Moore, Collector of Suharunpoor,

did in a considerable degree in making the five years settlement from 1228 to 1232 F. S. (1820-1 to 1824-5) which produced respectively 13,365, 13,438, 12,756, 12,805, 12,966 rupees.

150. The officer at present in charge was enabled to give his undivided attention to the formation of the third settlement for five years, from 1233 to 1237 (1825-6 to 1829-30) inclusive, which was fixed respectively at 13,570, 13,595, 13,645, 13,645, 13,645 rupees, and will probably encrease in every successive settlement; but great moderation must be exercised in adding to the demand. This estimate includes the upper half of the province of Chandee.

151. Another source of revenue was the transit duties: these were collected on every article of commerce without exception, which was taken either to or from the hills or plains, and as the collecting stations were in different places, the same goods often paid twice or three times. The actual sum realized in 1222 Fussily (1814-15) was not 10,000 Rs. after paying expenses, and not 9,000 in 1223. The gross collection in the two years respectively, were 16,000 and 15,200 Rs. The small profit of the above, contrasted with the great draw-back to commerce and industry, naturally drew the notice of Government, and in 1224 F. S. (1816-17) the whole were abolished. This continued till 1226, (1818-19) when Mr. More representing the propriety of taking a cess for the produce of the jungles, a toll was laid upon it; for three years it was held *kucha* and produced about 4,000 rupees annually on an average; in 1229 (1821-2) the toll was farmed for 5,000 rupees a year for four years; in 1232 (1824-5) it was farmed for five years in different portions of the forest, for 8,500 rupees a year, (besides one place of taking the toll in the Kheree Pass, which for particular reasons was held *kucha*) which is perhaps as much as it will amount to.

152. The lower half of Purgunnah Chandee, transferred from Mooradabad in the beginning of 1826, yields in land revenue, according to the new settlement just made for four years, 783 Rs per mensem, and in revenue of jungle produce, 3200 Rs per annum.

153. The total collections of the Doon will therefore be, for the approaching year of 1235 Fussily or 1827-28 A. D., 26,164 Rs., exclusive of the *abkaree*, which will probably yield as much as in the present year, viz. 1,802 Rs.

FORMATION OF THE SETTLEMENT.

154. The present settlement was formed according to the land actually under cultivation in each village, with a considerable modification according to the sorts of grain chiefly cultivated, and whether the village had long been, or was newly inhabited. The Government assessment is, however, excessively light; in no village is it more than three annas per *kuchu* beega, (about 2 shillings per acre) 9 annas per pukka; in most villages not above 1½ or 2 annas per bigga; and in many the rent is merely nominal.

155. Some few of the villages are fully peopled and cultivated to their utmost extent, and might therefore be supposed capable of a much higher assessment; but, were such demanded, the inhabitants of such villages would immediately leave them and settle in those newly peopled, where the share of the produce taken by the holders from the cultivators, is from a twelfth to an eighteenth. Consequently it is necessary to encrease the demand very gradually upon the whole, and if this be done, the province will doubtless improve rapidly.

RENT-FREE LANDS.

156. The whole of the rent-free lands may be estimated at yielding about 2,600 Rs per annum, of which about 1,000 Rs goes to the Sikh temple at Dhera.

CIVIL CAUSES.

157. The number of civil causes during the years :

1823	1824	1825	and	1826	} Where the total amount of property litigated, was respectively
18	14	21	„	43	

tively 1,220 Rs, 734 Rs, 1,270 Rs and 3,553 Rs. The cause of greatest amount in each year was respectively 283 Rs, 289 Rs, 300 Rs and 548 rupees.

CRIMES.

158. Crimes are few. The following is a summary for four years :—

	Highway robbery and robbery by banditti	Murder.	Theft above 100 Rs	Theft above 50 Rs	Below 50 Rs
1823	4	0	2	4	32
1824	5	0	6	0	12
1825	4	1	4	0	9
1826	1	0	0	0	24

The total amount of property stolen for the four years respectively, was Rs 826, Rs 2,926; Rs 1,814; Rs 835. It should be observed, that whatever highway robberies or robberies by banditti are committed in the Doon, are entirely by gangs from the plains, who, as is well known, were particularly numerous and daring in the years 1823-24 and 25, since which they have greatly decreased. Of the above “highway robberies and dукytes” one was accompanied by murder and one by wounding, slightly : of other heinous crimes, such as rapes, arson, &c., there were none.

ACCIDENT.

159. There are no accidents peculiar to the province. A few people are killed by tigers, but the proportion both of the men and cattle is incredibly small in comparison with the numbers of tigers that exist. These animals would appear to live chiefly on deer or wild hogs.

CIVIL ADMINISTRATION.

160. The administration of the Doon is now vested in a single officer, who possesses the powers of judge, magistrate and collector of the revenue. The establishment of the office is on a very limited scale. The language in which business was transacted, was, when the Doon was annexed to Suharunpoor, Persian ; and as this was utterly unknown to every native of the province, the consequence was that every Government situation was filled by people from the plains ; and those of a very inferior description ; since those only who could not obtain employment there, would come to the Doon, where, from the poverty of the people, perquisites were but small—it being a perfectly understood matter, that in the greater part of Government offices here, as elsewhere, the salaries attached to

the situations open to natives, are insufficient to support the incumbents. Since the annexation of the province to Kumaon, the business has been conducted in the Oordoo or Hindoostanee, and chiefly in the Deva Nagree character, to the great satisfaction of the people, who can now transact their own business and understand the proceedings of the courts. The establishment of the police and revenue departments, consists of a Peshkar a Kanongo, a couple of writers and twelve chuprassees; who would be quite sufficient for all the business of the province, so quiet and well disposed are the inhabitants, were it not for the gangs of banditti who occasionally come up from the plains. To check these there are five duffadars and thirty-five burkundauzes, (police constables) who are all armed with carbines from the Government magazine, stationed at different posts along the lower range of hills; and during eight months of the year are strengthened by small detachments from the Sirmoor or Kumaon Battalion.

MILITARY FORCE.

161. The military force stationed within the Doon, consists of that Battalion, which is a local corps; its head-quarters are at Dehra. From its origin it is denominated a Goorkha corps, having been raised in 1815 from men who came over from the Goorkha service, but there are few real Goorkhas now among them. Probably of the whole about four-tenths are inhabitants of Gurhwall, two-tenths of Kumaon; three-tenths of the whole Nipalese territory, and one-tenth from various other places in the hills, including a very few from the plains. The English officers are one commandant, a second in command, and Adjutant; uniform green with red facings; the men are armed with neat and serviceable fusées. The bazar establishment is kept up in an excellent manner; major Young (now Colonel) requires the shop-keepers and others attached to maintain carriage for the articles in which they deal; consequently the corps is ready to move at a moment's warning. In October, 1824, when a serious disturbance occurred in the Suharunpoor district, a party of 200 men, besides officers commissioned and non-commissioned, received the order to march at 7 one evening and at 3 the next morning moved out without any requisition made for carriage to the civil authority. The shop-keepers of the bazar had their own: the native officers had servants and ponies; and with few exceptions the men carried their own baggage. Including the servants of major Young, who commanded the detachment, and of Mr. Shore, the civil officer, who accompanied it, the total of camp followers did not probably exceed half the amount of fighting men. The detachment made a forced march of twenty-seven miles that day over a bad road; next day being joined on the road by 150 men more of the same corps, who came from Seharunpoor, where they were stationed, accompanied by Mr. Grindall the Magistrate, Mr. Royle the Civil Surgeon, and captain Debude, an Engineer officer employed in surveying in this part, but who volunteered his aid on the occasion; it proceeded thirteen more and found the insurgents about 800 or 900 strong, posted in a small mud fort close to the village of Koonja.

162. These were headed by three notorious bandit chiefs; they had within a month plundered the town of Bhugwanpoor; attacked and carried off about 18,000 rupees of Government treasure in dispatch to the Collector's treasury, besides committing various minor acts of plunder and outrage in which many people were killed and wounded by them. They were so emboldened by their success, and by the hostile feeling which was at that time exhibiting itself towards the British Government all over that part of the country, that they induced Biji Sing, the owner of the fort of Koonja, to join them and give them shelter in his fort. There Kulloo, the chief of the dakoits, assumed the name and title of Rajah Kullian Sing, and sent notices round to the different landholders in

that part of the Suharunpoor district and in the Doon, demanding certain sums, in default of which he threatened to plunder the villages. They had resolved to plunder Suharunpoor itself on the night of the day which proved so fatal to them. Indeed, as the detachment had neither guns or scaling ladders, and the walls of the fort were in good order, the insurgents looked with confidence to the result; and in derision talked of beating off and cutting up the hill monkeys, as they called the men of the Sirmoor Battalion, and then carrying into effect the intended plunder of Suharunpoor.

163. On the 3d October, 1824, the second day after leaving Dehra, the detachment arrived before the fort; and were saluted by a fire of matchlocks and wall pieces; there seemed at first little prospect of effecting any good; as the fort appeared safe from attack without either guns or ladders, and the party far too small to surround it or prevent the escape of the insurgents in a body, which would have left them at liberty to prosecute their designs of plunder: the state of the country, too, rendered it extremely probable that they would be joined by parties of considerable strength which were forming all over the district either for that purpose, or to plunder on their own account. Every circumstance urged the adoption of prompt measures. It was suggested by Mr. Shore, and seconded by Captain Debude, to form a battering ram of a young tree, and to attempt by such means to breach the gate. Accordingly all preparations being completed under cover of a small grove and temple near the gate, a flanking party was thrown out on each side to keep down the fire from the walls, (in which fortunately there were no loop-holes; so that the besieged were obliged to put their heads over to fire) the ram slung by ropes, to be worked by the men without any standard framework, was moved up to the gate, followed by the main body. After some time the gate was forced open, and the men rushed in. A great many of the insurgents jumped down the walls and escaped, but all the best men retreating into the small rooms and houses with which the fort was filled, fought sword in hand to the last with that desperation, which the certainty of being killed on one side or hanged on the other, generally inspires; nearly a third of the insurgents were cut up; the Goorkhas' loss was forty killed and wounded.

164. The people all over that part of the country had adopted a notion that the British were going to evacuate some of the north-western provinces; and in many instances even those who were peaceably disposed had objected to pay the revenue, observing that the money might as well remain in their hands until the change of Government should have been completed, to prevent their being called upon to pay it twice: but the greater part were actuated by a decidedly hostile feeling, which many did not hesitate to show. The effect of the storm of this fort was, to use the words of a neighbouring Magistrate, like an electric shock: it happened at an auspicious moment and was productive of important public benefit; in which terms the service was most handsomely acknowledged by Government. Detachments from this Battalion have been constantly employed in checking the gangs of banditti, who, occasionally lurking in the hilly and jungly ground between the Doon and the plains, are ready for any opportunity of plunder. The corps also formed part of the force under Sir David Ochterlony in the Pindary campaign, and a portion of it was at Bhurutpoor.

CHARACTER.

165. There is always a difficulty in drawing a general character of the people of any province, which might be expected to be greater than usual in one like this, where so many races are intermixed: but though, of course, there are many shades of distinction, the following may be taken for as near a description as any general one can be. The chief

feature of the people is their laziness and apathy, and this is probably to be attributed to the tyranny and oppression which had existed for so many years previous to the accession of the British authority, which has so completely broken the spirit of the people, that they seem to be infinitely more deficient in energy than those of the plains, and till lately to be almost wanting in desire to raise themselves in the world. They are, however, a simple race, little addicted to falsehood, and excessively quiet ; thieving and, indeed, crimes of all sorts, being extremely rare.

166. In civil money causes the debt is generally owned by the defendant, and a bad season or other excuse for non-payment pleaded ; with a promise, which is generally performed, to pay as soon as he is able ; one man only has been confined for debt since February 1823. The criminal and miscellaneous department, consists perhaps of a few complaints of petty assault ; altogether, the hearing of complaints, and receiving petitions, of all sort in matters relating to the Doon alone, does not require, on an average, above an hour a day. Thefts and other crimes are few, amounting to only one hundred and eighteen in four years, among a population of about 24,000, of which fourteen were gang robberies committed by people from the plains. Murder is almost the only serious crime committed, and that is very rare, only one having occurred in four years ; it is usually perpetrated from jealousy or to destroy some poor old wretch who is supposed to be a wizzard or a witch.

167. The people are docile, and are persuaded without much difficulty, to attempt any thing which may better them, and on the whole, will not disappoint any one who quietly endeavours to do them good. With a little encouragement they are ready enough to communicate their wants and feelings and even to speak in a very unreserved way when they are allowed to do so ; of which many amusing instances are constantly occurring, some of which are subjoined in a note. The influx of people from the plains, consequent on the establishment of the convalescent depôt at Landour, will not tend to improve their morals.

GENERAL OBSERVATIONS.

168. The Doon has on the whole slightly improved since it came under the British authority ; but by no means so fast as it might have done, had circumstances allowed Government to have appointed a civil officer to the particular charge of it from the first. It is indeed greatly to be lamented that this could not, have been done, for some years will yet elapse before the evil consequences of the mode in which the valley was managed for several years after it was taken possession of by the British. The oppressions of the Goorkhas had been such that the accession of our Government was hailed with delight : those who remained in the province looked forward not merely to the enjoyment of justice and their rights, but to a little encouragement and assistance to enable them in some measure to recover their former prosperity ; and those who had been expatriated were looking forward to the hope of returning to their former homes. The annexation, however, of the Doon to Suharunpoor, blighted all these prospects. The evil consequences of this have been already alluded to ; for while on the one hand no assistance whatever was given to the people, on the other they suffered severe extortion and oppressions from the Government native officers, and from the servants of English gentleman who came into the valley on parties of pleasure : and it is no exaggeration to say, that after several years' experience of the British administration, the inhabitants of the Doon actually regretted the change of masters : and the emigrants who at first expected to be enabled to return to their former homes, soon relinquished the

idea; finding themselves better off where they were in the Sikh territory to which the greater number had gone.

169. The state of the district is such that it requires not merely negative care, by which is meant preventing oppression and malpractices by the Government native officers, and in other respects leaving the people to improve themselves, a plan which would answer admirably with most parts of the country under the British Government; but positive and unremitting care and vigilance to prevent the province from retrograding. The people require being stimulated into a little energy; but mere words will not effect this, unless accompanied by actions to prove to them that the person is in earnest. A hundred rupees, for instance, laid out properly in assisting them to dig a well, will induce the inhabitants of a large village to labor at the work at their leisure hours, to an extent, that a similar quantity of hired laborer would have cost perhaps 1,000 rupees. Of this there were several instances during the last year, but the officer in charge not having authority from Government to do so, advanced the money out of his own private funds.

170. Were a discretionary authority given to make occasional advances of money for digging wells, clearing forests, cutting small canals for irrigation, and making roads, there can be no doubt that the province would improve more in the next ten years, than it will, as matters at present are carried on, in fifty. It is no exaggeration to say that, had an officer been appointed with such powers in the year 1814, the land revenue alone would now have been full 30,000 rupees yearly, instead of not quite half that amount, although the total Government outlay in advances would not probably have exceeded 10,000 rupees; and that in a few years more this sum would have been doubled by the encrease of land brought under cultivation.

171. When at last a civil officer was appointed to reside in the Doon in 1823, the circumstances were very different; nine years more had passed over and still found the people in the same apathy and with the same want of spirit to exert themselves in which they had been for half a century, and what was worse, the moral influence of the British name had ceased to have any effect. At first so great were the hopes entertained, that a person of mild temper, with a little tact, and with authority to give some assistance in money, might have stirred up the people to make great exertions, and have succeeded in bringing back almost all the emigrants; but when Mr. Shore went to reside in the Doon, he found the above feeling not only as strong as ever, but to it was added a repugnance to have any communication with an Englishman, or with a Government officer of any description. It was also much more difficult to induce the expatriated people to return. Nine years had carried off many of the old stock, many of the existing race had either been born since the emigration of their families, or were so young at the time as scarcely to recollect their former homes, and they plainly answered that they were well off in their present abode, that they heard that the British Government was not better than that of the Goorkhas, and that they should not think of moving unless considerable assistance in money were given them to build their houses, dig canals, or otherwise promote their comfort.

172. It was sometime before the people could be induced to conquer their dislike to personal communication with the officer in charge of the district; but, by perseverance, this was effected, and he could not help feeling an interest in them. The province is on the whole now beginning to show an alteration for the better: in 1823 there were only seven carts; there are now more than a hundred. There is in the different villages an evident spirit of improvement succeeding to the former apathy; the people work harder

than they did, lands which have lain waste for perhaps thirty years or more, are now breaking up ; men who hitherto lived from hand to mouth as labourers, are now borrowing money to procure cattle and implements of husbandry, and they find people willing to lend. Some new villages are annually taken by men who have capital to bring them into cultivation, but the improvement is but a tithe of what might have been effected, by a resident officer with power to assist the people with advances of money ; and were this authority given now, the result would soon prove the truth of these observations.

173. To view the present state of the Doon, and wander over the jungles, seeing remains of tanks, wells of masonry, regular planted mango and other fruit groves, hedges and other vestiges of what it once was, is lamentable beyond conception ; and brings to one's mind fearful pictures of the miseries which must have accompanied its desolation ; it should at least induce those who have the power, to give assistance towards bringing it to its once prosperous state.

F. J. SHORE.

Dehra Doon, Assist. Commrs. office, April 30th, 1827.

NOTES TO THE REPORT ON THE DEHRA DOON.

(a) to para. 40.—Although practical jokes are, generally speaking, only to be tolerated among school boys, yet I used to play off one connected with this well, which will be allowed to be fair enough. It was to persuade my friends to descend the well in a bucket under the assurance that the depth was so great that from the bottom the stars were visible in day light. Yet there was a large shed over the well projecting many feet all round beyond its edge: it is surprising how many descended the well without recollecting the shed, although standing under it just before they went down.

(b.) to para. 43.—The black bear is not ordinarily carnivorous; nor will it injure a man unless occasionally when disturbed while eating or when with its young. But sometimes a madness seems to come over this animal, when it will devour flesh in preference to any thing else; and I have known instances of its being caught in traps baited with flesh for leopards. The natives call it *churruk* when in this state. At other times they show little ferocity even when disturbed with their young, as the following anecdote will show, which was well authenticated by the parties present. Six or seven men who were out hunting porcupines, came to a cave large enough for a man easily to crawl in on his hands and knees, at the mouth of which were marks of its being a haunt of these animals: one of the men crawled in with a stick in his hand, but instead of a porcupine, found a she bear with her two cubs. He had just time to call out, when the bear rushed at him: he mechanically turned his head on one side, when the bear seized him by the shoulder, dragged him some way into the cave, dropped him and returned to her cubs. The man lay motionless watching the glistening of the bear's eyes as she fondled her cubs, for about three hours, after which both bear and cubs went to sleep; and the man creeping out backwards as gently as possible, made his escape. The melancholy part remains to be told. On his being seized the others ran off calling out Punchum is killed by a bear: his mother, who was a widow, hearing this, said "my only son is now killed; I have no one left to take care of me,"—went off seven miles to the river, threw herself in and was drowned. Three hours afterwards her son came back very little hurt.

The natives have an absurd idea that a bear meeting a woman alone will carry her off to his cave for his wife. This is not confined to the lower orders: the Rajah of Terree told me a tale of a bear having kept a woman five days, at the end of which she was found upon a tree, by her husband and a party of friends,—which story the Rajah firmly believed.

The mode of hunting bears in the hills just above the Doon, is by large parties on foot, armed in every possible way, but chiefly with swords, spears and sticks, accompanied by dogs; at which sport the villagers shew great courage. A bear cannot spring in the least: his mode of attack is to rear on his hind legs and use his fore claws and teeth. At such times, when the animal is within a few feet, a man who is cool, with a good gun, may shoot him through the heart with great ease. The whole scene, including the previous hunt over the rugged hills, is glorious sport.

(c) to para. 44.—The mode of catching elephants is chiefly by pits. Each pit is about 22 feet long, 9 broad, and 9 or 10 deep; it is covered over with branches of trees and grass. Nevertheless, so cunning are these animals, that I do not believe they ever fall into the pits, when walking quietly along; the catastrophe happens when running away in consequence of having been frightened, or when browsing the branches of trees, particularly of the bamboo, they step backwards into the pit. If left alone, those of a tolerable size, would soon break down the side of the pit and escape, but within a short time after one is caught, the pit is surrounded by men with long spears, who drive the animal back at every attempt he makes, while others fasten his legs and neck, with ropes secured to neighbouring trees. He is usually taken out and carried away to the owner's residence the next day. This is effected by the pit being filled with grass and branches, which gradually rises the animal to the surface, when he is tied to a large tame elephant and walked off.

I once came by in the morning after a fine mukna had been caught. He was more than seven feet high and very savage. After a considerable time a rope was fastened round his hind leg and attached to a tree; he turned round and pressing his head upon it, without apparently the slightest exertion, snapped it asunder as if it had been pack thread; another rope he seized in his trunk and putting it into his mouth bit it in two. He then made a desperate effort to get out of the pit, and in spite of spears worked himself so high up as to be lying on his side on the edge of the pit, with his hind legs some way off the ground. The men thought it was now past hope, and away we went to get upon trees for safety from the enraged animal; but as he lay still, they made another rush at his forehead with their spears. He made another effort, lost his balance and fell back into the pit. He then stood quiet, apparently exhausted, and the men succeeded in lashing twelve ropes, one after the other, round his left hind leg, and fastening them to a tree. I then left, but heard afterwards that they had been unable to secure his neck, and that during the next night, he broke the ropes, beat down the side of the pit, and finally made his escape. These ropes are usually made of leather, and are each about an inch and a half in diameter.

Formerly men who made a business of elephant catching, were in the habit of keeping up pits and maintaining an establishment to watch them, but the expense of this more than swallowed up the profits. The villagers bordering on the jungles now keep up and watch the pits, which costs them nothing but the employment of a little leisure time; and when an elephant is caught, he is usually sold as he stands to one of the regular trainers. The price is about one-fourth of what the elephant will sell for when trained, but as nearly one half die under the discipline necessary, considering the expenses, the profit is but moderate. Tigers, bears, leopards, and deer are sometimes caught in these pits. In some parts the villagers keep up pits solely to catch these animals; the deer they eat, and for the others, who are easily shot in the pits, they get the Government reward. A full grown leopard or tiger will leap out of the pit although 9 or 10 feet deep.

A curious and melancholy instance occurred not long ago. A man having a little money left him by a relation, determined to try his fortune as an elephant catcher. He dug several pits and was so fortunate as to

catch a fine elephant within a day or two afterwards. Not having proper means to secure him, the animal broke down the pit, got out, and as usual in such cases ran to attack the man. The latter in endeavoring to escape, fell into another of his own pits; the elephant being too close to stop fell in upon him, smashed the man to atoms by his weight and broke his own loins in the fall. To prevent other elephants from being frightened away, the other hunters shot the one in the pit, and immediately filled it in with earth, and so ended the poor man's life and hopes.

Elephants are sometimes hunted down by tame ones and thus caught. Three or four men, each mounted on a swift tame elephant, go into the forest till they perceive a herd of wild ones. They raise a shout, which drives the herd off in different directions; (a herd will always run off at the shout of a man; a single elephant, particularly if it be a male, is usually very dangerous) and selecting one, pursue that until they overtake and surround it; when it is secured with ropes and brought home. Only very young elephants can be caught in this way. Keddas are unknown in this part of the country.

Not long ago an occurrence happened which would indeed have been a splendid sight to have witnessed; a fight between two wild male elephants of the largest size, until one was killed. No one actually witnessed it, but in one spot the ground was found covered with blood, and trampled for a large space by elephants, and one fine male lay dead, gored to death by his antagonist, who had left the spot.

The following are a specimen of the prices at which elephants caught in these jungles have lately been sold. One only four feet high, but two months caught, sold for Rs. 460; one six feet and a half high, six months caught, sold for 1,300; one six feet high, eight months caught, for 1,250; a young male, five and a half feet high, seven months caught, for 930. A man named Jomna Khan, of Jaulapoor, near Hurdwar, after taking horses to Calcutta a short time back, went to Silhet, where he bought two good sized elephants for Rs. 450. He took them to Hurdwar, where he sold them to Sikh chiefs, one for Rs. 1,600, the other for 1,800; a fortunate speculation as it turned out, but the risk was great; for elephants brought suddenly to the upper provinces from the moist climate of Eastern Bengal, frequently die. An anecdote is told in illustration of an English gentleman at Delhi, who once sent a confidential servant to Silhet, to purchase several elephants for himself and friends. When anxiously expecting the arrival of the animals, the servant walked in one morning, followed by several porters, bearing the tails of the elephants, who had all died on the road; and he had brought the tails, together with as many certificates from different police officers, to prove that they had really died, and prevent any suspicion of his having sold them. About seven or eight months are in general sufficient time to break in an elephant.

(d) para. 47. - It is beautiful sport to sit on a tree to watch for a tiger: nor is it any sacrifice of time. If a tiger kill a bullock in the morning, and do not eat it then, he will generally return for that purpose about sunset. In these cases the people used to make a platform in some neighbouring tree, and send me word if the place was within a short distance of my house or tent. I usually went down about 3 p. m. and took my post in the tree; at first I have sat up half the night, but after killing several I became less keen, and returned home if the animal had not come by the time it was dark.

If a person sits quiet, animals of all kinds will pass close to the tree, and birds will settle on it without appearing to be aware of the presence of man. Jackalls and village dogs will begin to gnaw the carcase, while vultures are standing round and perched upon the trees. But all the animals seem to know instinctively how the carcase came there and to be on the watch for the tiger. After every bite, or at the least shaking of the leaves, the dogs or jackalls start and look round, some times run off for several yards, when the carcase is immediately attacked by the vultures, who are driven off by the dogs on returning to their meal.

In one instant the dogs and jackalls vanish, and the vultures rise from the ground, and then we know that the tiger is approaching. When there is a clear spot near, he walks majestically across it without the least appearance of ferocity, to his evening meal; but as he nears the carcase, approaches it crouching, why, I cannot pretend to say, for he does not spring upon it; but it has always been the case with every tiger or leopard which I have watched in this way. He generally begins upon the breast or stomach, and when fully engaged, then the sportsman takes aim at the tiger's heart and pulls the fatal trigger. If struck they usually roar, but not if you miss them, which frequently happens in firing in the dark, even though the animal be only a few yards distant; they start, look about astonished as if a thunderbolt had fallen, but do not appear to know that a man is near them. If hungry they will sometimes again attack the carcase; but if not struck the first time, a person will almost always obtain a second shot before the animal leaves.

In this mode of shooting them there is no danger at all. In returning from the lurking place in the dark, if the tiger has not come, which he does not always do, all that is necessary is to have three or four men waiting in some safe spot to come at your signal with large torches. On one occasion I took my drawing materials and quietly sketched the tiger while he was eating his supper, and then took my gun and shot him.

In attacking them in large parties on foot there is considerable danger; but this is only done in particular cases when a tiger has taken up some post and makes a practice of carrying off men: in which case it is an object to destroy him even at the risk of two or three casualties; for many more lives would otherwise be lost. But whether by good fortune or good management, the casualties in this sort of sport are very few. On one occasion a large party of us went out, for of course we cannot send the men without accompanying them to share whatever risk there may be, and killed one tiger one day and three on the next, within four miles of Dehra; and only one person was hurt.

(e) para. 64. - I am told that Lieut. Kirke, Adjutant of the Birmoor battalion, has proved this idea to be correct; and that by care and attention he has produced fruits and vegetables of the first quality.

(f) para. 65. - "Seeing is believing" is a common proverb: stinging will sometimes produce the same results. I was mentioning this to an acquaintance who was on a visit to me, and who I perceived by his face was incredulous. In the evening I asked him to take a ride, and conducted him to a place where the nettles were of the

height specified. A pathway lay through them, and by constant use the smaller twigs had all been worn away, the stems being almost bare to the height of a man; above which the twigs were covered with leaves met over the path. I went first, and having prepared myself with a thick pair of gloves, pushed the branches aside away from my face as we rode along, and escaped without damage. My friend not being aware of what I was about, allowed many of the leaves to strike against his hands and face, and presently exclaimed "Is the place full of mosquitoes, or what is it that is biting me at such a rate?" "Oh," said I, "you will believe me next time I tell you of nettles twelve feet high." "Zounds," retorted he, "I will believe any thing you please, only let us get out of this."

(g) para. 67.—All along under the head *cucha seer* to *cucha bigah*, *pucka* to *pucka*, three of the former, one of the latter. The *seer* is rather more the quart; the *bigah* is to the best of my recollection, (I have mislaid my memorandum) rather more than half a statute acre.

(h) para. 76.—The want of roads in the hills is strongly exemplified by the prices of grain at Sreenugur, and at Hurdwar. When 80 *seers* or two maunds of wheat can sometimes be procured at the former place for 1 rupee, only 35 *seers* can be obtained at the latter. Yet the distance between the two places is not above twenty five miles crow-flight.

(i) para. 80.—I gave a copy of this to Capt. Herbert, late geological surveyor in the Himalayah, which he sent to the *Gleanings in Science*. In the transcribing, however, several errors have been committed, for the statement in that periodical is not correct.

(j) para. 92.—A friend (Col. A —) and myself, once went several miles down the Jumna on one of these rafts. The raft was about sixty feet long, and not above eight or nine broad, fitted up with a couple of small oars, but the men depended more on their poles to prevent the raft running aground. We shot down the rapids with great velocity, in several of them at the rate of seven or eight miles per hour, and in one or two for a few seconds I think we must have gone at the rate of full ten miles; the raft grating along the stones of the rapid like the rumbling of slight earthquake. At the tail of these water falls, as one may almost call them, the eddy would sometimes whirl the raft some three feet under water; and although at the recommendation of the raftmen we had taken the precaution to have a frame erected to sit upon, we could not avoid getting wet. At these moments the expression of the Colonel's face was highly interesting. The scenery of the rocky hills covered with luxuriant vegetation, through which the river wound its way in a narrow stream as clear as crystal, was most beautiful. There is one rapid called the "Dhola panee," or "foaming water," which is so violent, and the eddy at its foot so strong, that only one man remains on the raft whilst it shoots down; all the rest leave it above and get on board again below the rapid. Such is the state of the navigation of the Jumna for thirty or forty miles from the foot of the Budraj mountain; yet a few years ago a proposition was set on foot to supply Delhi with ice from Budraj, to be carried down the Jumna in boats. To say nothing of the navigation, it would cost full as much to make and collect the ice in the first instance at Budraj as at Delhi itself. So much for speculators who make proposals without knowing what they are about.

(k) para. 95.—Forster mentions a ledge of rocks in the Ganges near the village of Jamba or Djemah, which reached half across the river, and over which the water broke with great violence. This is a mistake; there neither is or ever was any such ledge of rocks: Forster must have been deceived by the appearance of a rapid where however the water only breaks over stones and pebbles. These rapids not unfrequently shift their places during a rainy season, the force of which carries the stones away from one place, leaving smooth water where the rapid existed, and accumulates them in another.

(l) para. 110.—From the enquiries I had made in the western Provinces and the Doon, I entertained a strong conviction that suttees might, at least in those parts of the country, be prevented by order, without creating any disturbance; and I determined on the first opportunity to take the responsibility on myself and make the experiment. In order to pave the way, I took every opportunity of telling the people that I would prevent these human sacrifices; in general little or no remark was made in reply; but sometimes an old man would observe "I have seen the Mohammedan, the Mahratta, the Sikh, and the Gurkwall rule in this province; they have all done as they pleased with us, and issued what orders they liked: I suppose the English will do the same." In May, 1820, I was encamped near the village of Bhogpoor, when a suttee was about to take place: the village watchman came to inform me, and by him I merely sent a message to say that if the suttee took place any where, (for it was on the borders of an independent Hindoo Prince's territory, and I feared they might cross the boundary and complete the suttee) I would impose a fine upon the whole village. Nothing more was done; the villagers collected together, prevented the widow from leaving her house, and carried away her deceased husband's body to be burnt with the usual ceremonies. No suttee, disturbance, or complaint occurred.

(m) para. 132.—The hill men are sometimes seized with fits of indigestion, which seem to bid defiance to medicine. To one man I gave an oz. of black salt; five hours after another oz. without any effect, some time after 8 grains of calomel and 20 of rhubarb, after that 5 grains of tartar emetic, before any effect was produced.

To another I gave in the morning 4 grains tartar emetic; in the afternoon an oz. of black salt; at night 13 grs. calomel; next morning 10 grs. calomel and 30 of jalap; in the afternoon 8 grs. tartar emetic and a glyster; but it was not until after several glysters had been administered (for as they gave him ease from the great pain he complained of I continued them) that any effect was produced. After all in neither case was the purging or vomiting violent.

Wounds are speedily cured at most seasons. I once set a boy's arm which had been broken by a kick from a cow; and in a fortnight it had joined. Living so much away from other Englishmen, and being constantly solicited for medicine by the people, induced me to read medical books; which has enabled me, by the help of practice, to be of use to many.

(n) para. 147.—The native era is the *Fuslee*.

(o) para. 161.—Since altered to black *saings*.

(p) para. 107.—When the people have become acquainted with an officer, they are very free and unreserved in their communications, and the scenes and conversations that occur are amusing.

As I was one day returning to my tent from a ride near Hurdwar, I overtook a man walking along at a terrible rate with his face swelling like a turkey-cock; as soon as he saw me, he called out "I was just coming to you, Sir, to ask you to punish that rascal Choona Sing."

"What for, what has he done?"

"Your honor, he has owed me seven rupees for this year past, and just now when I went to ask him to pay me, he abused, beat me, and took my sword away;" seeing the man was in a fury of passion I could not help joking a little with him, and observed—

"But Choona Sing is not near so stout a man as you, how is it you allowed him to treat you in this way?"

"I am not afraid of Choona Sing, but of your honor. Oh! if your worship will only give me leave I will engage to slap him to death before you with my open hand."

"But my friend Choona Sing is a respectable man and rents a village; if you kill him whence am I to get the rent?"

"He respectable! He pay rent! he does nothing but cheat and abuse every honest man he comes across; and I hope you will trounce him severely for his infamous conduct to me."

"Oh, certainly, but we will send him a summons first and hear what he has to say."

On another occasion as I was sitting under a tree in the jungle, smoking a pipe after a long ride, a wood-cutter who was employed there came up, and after a little chatting began—

"Oh, Sir, you committed great injustice the other day."

"Indeed! I am very sorry to hear it; how was it?"

"Why, when you decided Baloo's cause against me."

"But my friend it is impossible to please both parties, and I dare say that Baloo will tell me I gave a most admirable decision."

But of all horrors it is to be obliged to listen to a complaint by an old woman; it is amusing also to hear her rant, and rave, and cry, and wander away from the point in question, to which it is the most difficult thing to keep her. e. g.

"I'm ruined—I'm plundered!—I have nothing left but to throw myself into the river!—Justice! justice! Will no one hear my complaint?"

"But what is the matter, my good woman?"

"Matter! here have I been telling you how I am ruined and plundered, and no justice can I get: poor people are never attended to."

"But do tell me what has happened; how can I do any thing till you do?"

"If you will not give me justice I can't help it: a pretty Government this: it is that of Kulloo (a noted bandit) not that of the English as far as I am concerned." &c. &c.

And after about half an hour of this work one gets at the cream of the story, which is perhaps the delay of a day in the payment of a few pice for some vegetables which the old woman has sold, or some such trivial matter. And all the time the old hag is looking as spiteful as if she were ready to tear the eyes out of any one who approached her. When once enraged these old creatures never for a moment reflect on the probability of the story they are telling, and will, without any hesitation, make the most incredible accusations. It would not in the slightest degree surprise me to hear an old woman of eighty, accuse a man of a hundred years old, who had been bedridden half that period, of having ravished her. The young ones are bad enough, but heaven defend one from encountering an old native woman when in a passion!

The Boksas are fine free spoken men when encouraged, and I have been much delighted when hunting with them, to see the spirit with which they enter into the sport, and the ease with which they talk to a superior. They unfortunately are fond of liquor, and like all natives of India who once adopt the taste cannot refrain from excess. On one occasion after a hard day's sport I offered a knowing old hand a bottle of brandy, which he joyfully accepted, observing—

"I shall keep this till I get home."

"That is, because you intend to get drunk at the hooly!" (which was then approaching)

"Just so, and if I were to get drunk here and make a noise in your camp, you would be angry."

"Perhaps I should; but can you not divide it into three or four portions, and drink one each day; the pleasure would last longer, and you would avoid getting tipsy."

"Oh, Sir, that would be no pleasure to have a cup merely, without getting comfortably jolly;" and comfortably jolly the man got, and got his head half broke too in a scuffle, as I afterwards learnt.